Milliman

December 2013
Amity Fire District/2742

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Amity Fire District/2742

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Amity Fire District -- #2742

December 2013

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Executive Summary

Milliman has prepared this report for Amity Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Amity Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Amity Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(5.31%)	(5.31%)	(5.31%)	(5.31%)	(5.31%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.66%**	**11.11%**	**15.66%**	**5.13%**	**9.23%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.22%**	**11.67%**	**16.22%**	**5.61%**	**9.71%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.82%	6.62%	14.82%	5.17%	7.88%
July 1, 2013 to June 30, 2015	15.04%	7.90%	15.04%	6.25%	8.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Amity Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$101,583	$157,454
Allocated pre-SLGRP pooled liability/(surplus)	(19,659)	(20,154)
Transition liability/(surplus)	(59,374)	(60,051)
Allocated pooled OPSRP UAL	6,993	1,685
Side account	0	0
Net unfunded pension actuarial accrued liability	29,543	78,934
Combined valuation payroll	99,215	98,770
Net pension UAL as a percentage of payroll	30%	80%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(5.31%)	(5.23%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,082	$2,559
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	93,622	16,749	15.06%	93,634	14,101
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**93,622**	**16,749**		**93,634**	**14,101**
Total		**$93,622**	**$16,749**		**$93,634**	**$14,101**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($60,051)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.44%)
B. Actual employer payroll	45,757
C. Payment to transition liability/(surplus)	(2,489)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.44%)
B. Actual employer payroll	47,527
C. Payment to transition liability/(surplus)	(2,586)
4. Supplemental payment to transition liability	0
5. Interest	(4,398)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($59,374)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(59,374)	(60,051)
2. Combined valuation payroll	99,215	98,770
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.31%)**	**(5.23%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	99,215	98,770
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Mist-Birkenfeld Rural Fire Protection District/2752
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Mist-Birkenfeld Rural Fire Protection District/2752

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Mist-Birkenfeld Rural Fire Protection District/2752

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Mist-Birkenfeld Rural Fire Protection District -- #2752

December 2013

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Executive Summary

Milliman has prepared this report for Mist-Birkenfeld Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Mist-Birkenfeld Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Mist-Birkenfeld Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.91%	10.58%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(7.99%)	(7.99%)	(7.99%)	(7.99%)	(7.99%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.76%**	**7.43%**	**14.74%**	**4.21%**	**8.31%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.32%**	**7.99%**	**15.30%**	**4.69%**	**8.79%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.44%	8.30%	14.19%	4.54%	7.25%
July 1, 2013 to June 30, 2015	13.05%	9.01%	13.65%	4.86%	7.59%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Mist-Birkenfeld Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$201,145	$298,425
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(176,962)	(179,178)
Allocated pooled OPSRP UAL	13,847	3,194
Side account	0	0
Net unfunded pension actuarial accrued liability	38,030	122,441
Combined valuation payroll	196,456	187,200
Net pension UAL as a percentage of payroll	19%	65%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(7.99%)	(8.23%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,122	$4,850
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	26,359	2,789	10.42%	24,082	2,509
Total General Service		**26,359**	**2,789**		**24,082**	**2,509**
Tier 1 Police & Fire	17.89%	170,097	30,430	15.06%	163,118	24,566
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**170,097**	**30,430**		**163,118**	**24,566**
Total		**$196,456**	**$33,219**		**$187,200**	**$27,075**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**16.91%**			**14.46%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($179,178)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.77%)
B. Actual employer payroll	93,629
C. Payment to transition liability/(surplus)	(7,275)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.77%)
B. Actual employer payroll	103,592
C. Payment to transition liability/(surplus)	(8,049)
4. Supplemental payment to transition liability	0
5. Interest	(13,108)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($176,962)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(176,962)	(179,178)
2. Combined valuation payroll	196,456	187,200
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(7.99%)**	**(8.23%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	196,456	187,200
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Mill City Rural Fire Protection District/2853
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Mill City Rural Fire Protection District/2853

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Mill City Rural Fire Protection District/2853

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Mill City Rural Fire Protection District -- #2853

December 2013

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Executive Summary

Milliman has prepared this report for Mill City Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Mill City Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Mill City Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(10.28%)	(10.28%)	(10.28%)	(10.28%)	(10.28%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.26%**	**7.90%**	**10.26%**	**1.92%**	**6.02%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.82%**	**8.46%**	**10.82%**	**2.40%**	**6.50%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.08%	3.72%	11.08%	2.27%	4.98%
July 1, 2013 to June 30, 2015	11.18%	3.98%	11.18%	2.33%	5.06%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Mill City Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$50,474	$78,729
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(57,110)	(57,727)
Allocated pooled OPSRP UAL	3,475	843
Side account	0	0
Net unfunded pension actuarial accrued liability	(3,161)	21,845
Combined valuation payroll	49,297	49,386
Net pension UAL as a percentage of payroll	(6%)	44%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(10.28%)	(10.05%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,034	$1,279
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	49,297	7,740	15.12%	49,386	7,467
Total Police & Fire		**49,297**	**7,740**		**49,386**	**7,467**
Total		**$49,297**	**$7,740**		**$49,386**	**$7,467**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($57,727)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(10.04%)
B. Actual employer payroll	23,486
C. Payment to transition liability/(surplus)	(2,358)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(10.04%)
B. Actual employer payroll	24,791
C. Payment to transition liability/(surplus)	(2,489)
4. Supplemental payment to transition liability	0
5. Interest	(4,230)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($57,110)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(57,110)	(57,727)
2. Combined valuation payroll	49,297	49,386
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(10.28%)**	**(10.05%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	49,297	49,386
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Mid-Willamette Valley Senior Service Agency/2657
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Mid-Willamette Valley Senior Service Agency/2657

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Mid-Willamette Valley Senior Service Agency/2657

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Mid-Willamette Valley Senior Service Agency -- #2657

December 2013

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Executive Summary

Milliman has prepared this report for Mid-Willamette Valley Senior Service Agency to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Mid-Willamette Valley Senior Service Agency.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Mid-Willamette Valley Senior Service Agency

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.09%	13.09%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.47%)	(5.47%)	(5.47%)	(5.47%)	(5.47%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.46%**	**12.46%**	**16.09%**	**6.73%**	**10.83%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.02%**	**13.02%**	**16.65%**	**7.21%**	**11.31%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.78%	9.78%	17.30%	8.07%	10.78%
July 1, 2013 to June 30, 2015	9.24%	9.24%	16.23%	7.41%	10.14%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Mid-Willamette Valley Senior Service Agency

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$7,966,392	$13,222,489
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(4,797,079)	(4,791,801)
Allocated pooled OPSRP UAL	548,403	141,522
Side account	0	0
Net unfunded pension actuarial accrued liability	3,717,716	8,572,210
Combined valuation payroll	7,780,675	8,294,373
Net pension UAL as a percentage of payroll	48%	103%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.47%)	(4.97%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$163,242	$214,870
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,258,616	$356,861	5.78%	$2,713,695	$156,852
Tier 2 General Service	10.58%	2,435,666	257,693	10.42%	2,714,790	282,881
Total General Service		**4,694,282**	**614,554**		**5,428,485**	**439,733**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$4,694,282**	**$614,554**		**$5,428,485**	**$439,733**
Employer normal cost rate						
General Service			**13.09%**			**8.10%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.09%**			**8.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($4,791,801)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.24%)
B. Actual employer payroll	4,234,519
C. Payment to transition liability/(surplus)	(179,544)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.24%)
B. Actual employer payroll	4,021,631
C. Payment to transition liability/(surplus)	(170,517)
4. Supplemental payment to transition liability	0
5. Interest	(355,339)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($4,797,079)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(4,797,079)	(4,791,801)
2. Combined valuation payroll	7,780,675	8,294,373
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.47%)**	**(4.97%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	7,780,675	8,294,373
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Mid-Columbia Center For Living/2811
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Mid-Columbia Center For Living/2811

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Mid-Columbia Center For Living/2811

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Mid-Columbia Center For Living -- #2811

December 2013

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Executive Summary

Milliman has prepared this report for Mid-Columbia Center For Living to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Mid-Columbia Center For Living.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Mid-Columbia Center For Living

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.59%	12.59%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.24%	0.24%	0.24%	0.24%	0.24%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.91%**	**15.91%**	**20.04%**	**10.68%**	**14.78%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.47%**	**16.47%**	**20.60%**	**11.16%**	**15.26%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.52%	12.52%	20.05%	10.82%	13.53%
July 1, 2013 to June 30, 2015	13.10%	13.10%	19.68%	10.86%	13.59%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Mid-Columbia Center For Living

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,995,044	$6,134,925
Allocated pre-SLGRP pooled liability/(surplus)	(773,149)	(785,280)
Transition liability/(surplus)	106,904	107,348
Allocated pooled OPSRP UAL	275,017	65,663
Side account	0	0
Net unfunded pension actuarial accrued liability	3,603,816	5,522,656
Combined valuation payroll	3,901,909	3,848,395
Net pension UAL as a percentage of payroll	92%	144%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.24%	0.24%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$81,864	$99,695
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$573,334	$90,587	5.78%	$634,566	$36,678
Tier 2 General Service	10.58%	914,442	96,748	10.42%	908,359	94,651
Total General Service		**1,487,776**	**187,335**		**1,542,925**	**131,329**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$1,487,776**	**$187,335**		**$1,542,925**	**$131,329**
Employer normal cost rate						
General Service			**12.59%**			**8.51%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.59%**			**8.51%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$107,348
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.21%
B. Actual employer payroll	2,025,681
C. Payment to transition liability/(surplus)	4,254
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.21%
B. Actual employer payroll	1,956,734
C. Payment to transition liability/(surplus)	4,109
4. Supplemental payment to transition liability	0
5. Interest	7,919
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$106,904**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	106,904	107,348
2. Combined valuation payroll	3,901,909	3,848,395
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.24%**	**0.24%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,901,909	3,848,395
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

Metropolitan Area Communications Commission/2663
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Metropolitan Area Communications Commission/2663

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Metropolitan Area Communications Commission/2663

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Metropolitan Area Communications Commission -- #2663

December 2013

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Executive Summary

Milliman has prepared this report for Metropolitan Area Communications Commission to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Metropolitan Area Communications Commission.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Metropolitan Area Communications Commission

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.96%	14.96%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.41%)	(1.41%)	(1.41%)	(1.41%)	(1.41%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.63%**	**16.63%**	**18.39%**	**9.03%**	**13.13%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.19%**	**17.19%**	**18.95%**	**9.51%**	**13.61%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.69%	9.69%	18.70%	9.47%	12.18%
July 1, 2013 to June 30, 2015	7.69%	7.69%	16.25%	7.43%	10.16%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Metropolitan Area Communications Commission

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$957,144	$638,713
Allocated pre-SLGRP pooled liability/(surplus)	(185,233)	(81,756)
Transition liability/(surplus)	(149,035)	(148,504)
Allocated pooled OPSRP UAL	65,889	6,836
Side account	0	0
Net unfunded pension actuarial accrued liability	688,765	415,289
Combined valuation payroll	934,831	400,660
Net pension UAL as a percentage of payroll	74%	104%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.41%)	(3.19%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,613	$10,379
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$395,987	$62,566	5.78%	$193,437	$11,181
Tier 2 General Service	10.58%	76,275	8,070	10.42%	37,181	3,874
Total General Service		**472,262**	**70,636**		**230,618**	**15,055**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$472,262**	**$70,636**		**$230,618**	**$15,055**
Employer normal cost rate						
General Service			**14.96%**			**6.53%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.96%**			**6.53%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($148,504)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.14%)
B. Actual employer payroll	447,926
C. Payment to transition liability/(surplus)	(5,106)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.14%)
B. Actual employer payroll	473,922
C. Payment to transition liability/(surplus)	(5,403)
4. Supplemental payment to transition liability	0
5. Interest	(11,040)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($149,035)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(149,035)	(148,504)
2. Combined valuation payroll	934,831	400,660
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.41%)**	**(3.19%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	934,831	400,660
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Metro/2594
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Metro/2594

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
Metro/2594

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

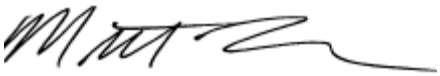
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

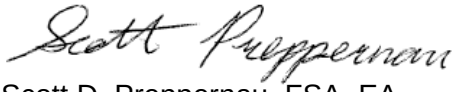
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Metro -- #2594

December 2013

Secondary Employers

2171 Portland Zoological Society

2807 Friends of the Zoo

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Executive Summary

Milliman has prepared this report for Metro to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Metro.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Metro

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.14%	13.14%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.17%)	(1.17%)	(1.17%)	(1.17%)	(1.17%)
Side account rate relief [2]	(3.32%)	(3.32%)	(3.32%)	(3.32%)	(3.32%)
Net pension contribution rate	**11.73%**	**11.73%**	**15.31%**	**5.95%**	**10.05%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.29%**	**12.29%**	**15.87%**	**6.43%**	**10.53%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.08%	8.08%	15.77%	6.54%	9.25%
July 1, 2013 to June 30, 2015	8.35%	8.35%	15.36%	6.54%	9.27%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Metro

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$51,842,069	$82,921,728
Allocated pre-SLGRP pooled liability/(surplus)	(10,032,842)	(10,614,104)
Transition liability/(surplus)	(6,693,301)	(6,779,267)
Allocated pooled OPSRP UAL	3,568,788	887,520
Side account	18,957,920	17,903,994
Net unfunded pension actuarial accrued liability	19,726,794	48,511,883
Combined valuation payroll	50,633,499	52,016,209
Net pension UAL as a percentage of payroll	39%	93%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.17%)	(1.12%)
Side account rate relief	(3.32%)	(2.96%)
Allocated pooled RHIA UAL	$1,062,312	$1,347,506
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$14,688,380	$2,320,764	5.78%	$16,286,770	$941,375
Tier 2 General Service	10.58%	15,272,271	1,615,806	10.42%	16,069,614	1,674,454
Total General Service		**29,960,651**	**3,936,570**		**32,356,384**	**2,615,829**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$29,960,651**	**$3,936,570**		**$32,356,384**	**$2,615,829**
Employer normal cost rate						
General Service			**13.14%**			**8.08%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.14%**			**8.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($6,779,267)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.08%)
B. Actual employer payroll	26,589,022
C. Payment to transition liability/(surplus)	(287,161)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.08%)
B. Actual employer payroll	27,278,135
C. Payment to transition liability/(surplus)	(294,605)
4. Supplemental payment to transition liability	0
5. Interest	(495,800)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($6,693,301)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(6,693,301)	(6,779,267)
2. Combined valuation payroll	50,633,499	52,016,209
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.17%)**	**(1.12%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$17,903,994**	**$17,903,994**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,467,884)	(1,467,884)
5. Side account earnings during 2012		2,522,810	2,522,810
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$18,957,920**	**$18,957,920**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$18,957,920	$17,903,994
Side Account 2	0	0
Side Account 3	0	0
Total	**$18,957,920**	**$17,903,994**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$18,957,920	$17,903,994
2. Combined valuation payroll	50,633,499	52,016,209
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(3.32%)	(2.96%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Medford Irrigation District/2592
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Medford Irrigation District/2592

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Medford Irrigation District/2592

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Medford Irrigation District -- #2592

December 2013

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Executive Summary

Milliman has prepared this report for Medford Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Medford Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Medford Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.82%	14.82%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.09%)	(3.09%)	(3.09%)	(3.09%)	(3.09%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.57%**	**16.57%**	**18.47%**	**9.11%**	**13.21%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.13%**	**17.13%**	**19.03%**	**9.59%**	**13.69%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.78%	9.78%	18.75%	9.52%	12.23%
July 1, 2013 to June 30, 2015	9.91%	9.91%	18.52%	9.70%	12.43%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Medford Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$398,544	$695,519
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(135,777)	(138,596)
Allocated pooled OPSRP UAL	27,436	7,444
Side account	0	0
Net unfunded pension actuarial accrued liability	290,203	564,367
Combined valuation payroll	389,253	436,294
Net pension UAL as a percentage of payroll	75%	129%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.09%)	(2.73%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,167	$11,302
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$181,738	$28,715	5.78%	$233,140	$13,475
Tier 2 General Service	10.58%	41,879	4,431	10.42%	41,487	4,323
Total General Service		**223,617**	**33,146**		**274,627**	**17,798**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$223,617**	**$33,146**		**$274,627**	**$17,798**
Employer normal cost rate						
General Service			**14.82%**			**6.48%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.82%**			**6.48%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($138,596)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.79%)
B. Actual employer payroll	226,563
C. Payment to transition liability/(surplus)	(6,321)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.79%)
B. Actual employer payroll	234,975
C. Payment to transition liability/(surplus)	(6,556)
4. Supplemental payment to transition liability	0
5. Interest	(10,058)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($135,777)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(135,777)	(138,596)
2. Combined valuation payroll	389,253	436,294
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.09%)**	**(2.73%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	389,253	436,294
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

McKenzie Fire And Rescue/2628
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
McKenzie Fire And Rescue/2628

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
McKenzie Fire And Rescue/2628

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

McKenzie Fire And Rescue -- #2628

December 2013

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Executive Summary

Milliman has prepared this report for McKenzie Fire And Rescue to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to McKenzie Fire And Rescue.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for McKenzie Fire And Rescue

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.73%	15.80%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(6.77%)	(6.77%)	(6.77%)	(6.77%)	(6.77%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.04%**	**12.11%**	**12.01%**	**3.67%**	**7.77%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.60%**	**12.67%**	**12.57%**	**4.15%**	**8.25%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.26%	4.32%	12.34%	3.53%	6.24%
July 1, 2013 to June 30, 2015	9.63%	4.92%	12.94%	4.09%	6.82%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

McKenzie Fire And Rescue

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$317,175	$504,889
Allocated pre-SLGRP pooled liability/(surplus)	(61,382)	(64,626)
Transition liability/(surplus)	(236,530)	(240,527)
Allocated pooled OPSRP UAL	21,834	5,404
Side account	0	0
Net unfunded pension actuarial accrued liability	41,097	205,140
Combined valuation payroll	309,781	316,713
Net pension UAL as a percentage of payroll	13%	65%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(6.77%)	(6.53%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,499	$8,205
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$49,546	$7,828	5.78%	$48,589	$2,808
Tier 2 General Service	10.58%	0	0	10.42%	19,266	2,008
Total General Service		**49,546**	**7,828**		**67,855**	**4,816**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	98,389	15,447	15.12%	96,634	14,611
Total Police & Fire		**98,389**	**15,447**		**96,634**	**14,611**
Total		**$147,935**	**$23,275**		**$164,489**	**$19,427**
Employer normal cost rate						
General Service			**15.80%**			**7.10%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.73%**			**11.81%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($240,527)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.08%)
B. Actual employer payroll	155,625
C. Payment to transition liability/(surplus)	(11,018)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.08%)
B. Actual employer payroll	148,305
C. Payment to transition liability/(surplus)	(10,500)
4. Supplemental payment to transition liability	0
5. Interest	(17,521)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($236,530)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(236,530)	(240,527)
2. Combined valuation payroll	309,781	316,713
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.77%)**	**(6.53%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	309,781	316,713
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Marion County/2009
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Marion County/2009

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Marion County/2009

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Marion County -- #2009

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Marion County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Marion County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Marion County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.19%	13.17%	16.73%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.46%)	(4.46%)	(4.46%)	(4.46%)	(4.46%)
Side account rate relief [2]	(2.17%)	(2.17%)	(2.17%)	(2.17%)	(2.17%)
Net pension contribution rate	**12.40%**	**11.38%**	**14.94%**	**5.57%**	**9.67%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.96%**	**11.94%**	**15.50%**	**6.05%**	**10.15%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.87%	7.91%	15.55%	6.30%	9.01%
July 1, 2013 to June 30, 2015	9.82%	7.85%	14.86%	6.04%	8.77%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Marion County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$75,862,484	$118,198,622
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(37,219,384)	(37,528,280)
Allocated pooled OPSRP UAL	5,222,345	1,265,092
Side account	18,142,256	17,148,651
Net unfunded pension actuarial accrued liability	25,723,189	64,786,783
Combined valuation payroll	74,093,937	74,145,153
Net pension UAL as a percentage of payroll	35%	87%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.46%)	(4.35%)
Side account rate relief	(2.17%)	(1.99%)
Allocated pooled RHIA UAL	$1,554,522	$1,920,768
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$16,291,545	$2,574,064	5.78%	$17,340,699	$1,002,292
Tier 2 General Service	10.58%	16,497,176	1,745,401	10.42%	17,001,162	1,771,521
Total General Service		**32,788,721**	**4,319,465**		**34,341,861**	**2,773,813**
Tier 1 Police & Fire	17.89%	6,119,388	1,094,759	15.06%	6,470,343	974,434
Tier 2 Police & Fire	15.70%	6,946,043	1,090,529	15.12%	7,002,154	1,058,726
Total Police & Fire		**13,065,431**	**2,185,288**		**13,472,497**	**2,033,160**
Total		**$45,854,152**	**$6,504,753**		**$47,814,358**	**$4,806,973**
Employer normal cost rate						
General Service			**13.17%**			**8.08%**
Police & Fire			**16.73%**			**15.09%**
Aggregate (Default)			**14.19%**			**10.05%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($37,528,280)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.07%)
B. Actual employer payroll	37,052,426
C. Payment to transition liability/(surplus)	(1,508,034)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.07%)
B. Actual employer payroll	38,276,489
C. Payment to transition liability/(surplus)	(1,557,853)
4. Supplemental payment to transition liability	0
5. Interest	(2,756,991)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($37,219,384)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(37,219,384)	(37,528,280)
2. Combined valuation payroll	74,093,937	74,145,153
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.46%)**	**(4.35%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$17,148,651**	**$17,148,651**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,423,827)	(1,423,827)
5. Side account earnings during 2012		2,418,432	2,418,432
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$18,142,256**	**$18,142,256**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$18,142,256	$17,148,651
Side Account 2	0	0
Side Account 3	0	0
Total	**$18,142,256**	**$17,148,651**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$18,142,256	$17,148,651
2. Combined valuation payroll	74,093,937	74,145,153
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(2.17%)	(1.99%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Marion County Housing Authority/2598
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Marion County Housing Authority/2598

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Marion County Housing Authority/2598

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

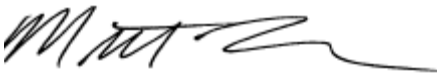
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

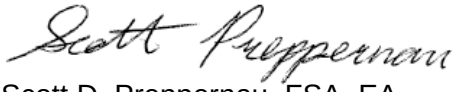
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Marion County Housing Authority -- #2598

December 2013

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Executive Summary

Milliman has prepared this report for Marion County Housing Authority to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Marion County Housing Authority.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Marion County Housing Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.77%	12.77%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(15.02%)	(15.02%)	(15.02%)	(15.02%)	(15.02%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**2.59%**	**2.59%**	**6.54%**	**0.00%**	**1.28%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**3.15%**	**3.15%**	**7.10%**	**0.48%**	**1.76%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.34%	0.34%	7.59%	0.00%	1.07%
July 1, 2013 to June 30, 2015	0.00%	0.00%	6.27%	0.00%	0.18%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Marion County Housing Authority

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,019,799	$1,554,059
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,686,754)	(1,691,926)
Allocated pooled OPSRP UAL	70,203	16,633
Side account	0	0
Net unfunded pension actuarial accrued liability	(596,752)	(121,234)
Combined valuation payroll	996,025	974,850
Net pension UAL as a percentage of payroll	(60%)	(12%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(15.02%)	(14.93%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$20,897	$25,254
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$297,346	$46,981	5.78%	$305,098	$17,635
Tier 2 General Service	10.58%	410,487	43,430	10.42%	406,159	42,322
Total General Service		**707,833**	**90,411**		**711,257**	**59,957**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$707,833**	**$90,411**		**$711,257**	**$59,957**
Employer normal cost rate						
General Service			**12.77%**			**8.43%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.77%**			**8.43%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,691,926)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(13.95%)
B. Actual employer payroll	500,037
C. Payment to transition liability/(surplus)	(67,386)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(13.95%)
B. Actual employer payroll	466,149
C. Payment to transition liability/(surplus)	(62,731)
4. Supplemental payment to transition liability	0
5. Interest	(124,945)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,686,754)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,686,754)	(1,691,926)
2. Combined valuation payroll	996,025	974,850
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(15.02%)**	**(14.93%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	996,025	974,850
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

December 2013

Marion County Fire District #1/2580
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Marion County Fire District #1/2580

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Marion County Fire District #1/2580

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

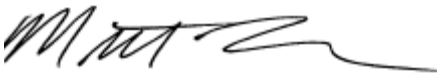
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

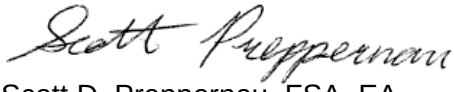
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Marion County Fire District #1 -- #2580

December 2013

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Executive Summary

Milliman has prepared this report for Marion County Fire District #1 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Marion County Fire District #1.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Marion County Fire District #1

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.39%	12.65%	16.62%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	1.65%	1.65%	1.65%	1.65%	1.65%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**22.88%**	**19.14%**	**23.11%**	**13.85%**	**17.95%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**23.44%**	**19.70%**	**23.67%**	**14.33%**	**18.43%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%	0.00%	0.00%
July 1, 2013 to June 30, 2015	22.83%	0.00%	0.00%	14.74%	17.47%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.56%	0.48%	0.48%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Marion County Fire District #1

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,764,162	
Allocated pre-SLGRP pooled liability/(surplus)	0	
Transition liability/(surplus)	682,518	
Allocated pooled OPSRP UAL	259,123	
Side account	0	
Net unfunded pension actuarial accrued liability	4,705,803	
Combined valuation payroll	3,676,410	
Net pension UAL as a percentage of payroll	128%	
Pre-SLGRP pooled rate	0.00%	
Transition rate	1.65%	
Side account rate relief	0.00%	
Allocated pooled RHIA UAL	$77,133	
Allocated pooled RHIPA UAL	$0	

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$52,644	$8,318	0.00%	$0	$0
Tier 2 General Service	10.58%	80,126	8,477	0.00%	0	0
Total General Service		**132,770**	**16,795**		**0**	**0**
Tier 1 Police & Fire	17.89%	906,620	162,194	0.00%	0	0
Tier 2 Police & Fire	15.70%	1,242,477	195,069	0.00%	0	0
Total Police & Fire		**2,149,097**	**357,263**		**0**	**0**
Total		**$2,281,867**	**$374,058**		**$0**	**$0**
Employer normal cost rate						
General Service			**12.65%**			**0.00%**
Police & Fire			**16.62%**			**0.00%**
Aggregate (Default)			**16.39%**			**0.00%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$680,030
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.20%
B. Actual employer payroll	982,066
C. Payment to transition liability/(surplus)	11,785
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.38%
B. Actual employer payroll	2,629,303
C. Payment to transition liability/(surplus)	36,284
4. Supplemental payment to transition liability	0
5. Interest	50,557
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$682,518**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	682,518	0
2. Combined valuation payroll	3,676,410	0
3. Regular amortization factor	11.272	0.000
4. **Total transition liability/(surplus) rate**	**1.65%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	
2. Combined valuation payroll	3,676,410	
3. Amortization factor	11.272	
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Lyons Fire District/2823
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lyons Fire District/2823

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lyons Fire District/2823

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lyons Fire District -- #2823

December 2013

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Executive Summary

Milliman has prepared this report for Lyons Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lyons Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lyons Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.89%	0.89%	0.89%	0.89%	0.89%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.66%**	**19.07%**	**22.45%**	**13.09%**	**17.19%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.22%**	**19.63%**	**23.01%**	**13.57%**	**17.67%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.94%	14.63%	22.41%	13.18%	15.89%
July 1, 2013 to June 30, 2015	16.18%	14.95%	22.12%	13.30%	16.03%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lyons Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$41,652	$61,566
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	4,081	4,116
Allocated pooled OPSRP UAL	2,867	659
Side account	0	0
Net unfunded pension actuarial accrued liability	48,600	66,341
Combined valuation payroll	40,681	38,620
Net pension UAL as a percentage of payroll	119%	172%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.89%	0.92%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$854	$1,000
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$4,116
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.87%
B. Actual employer payroll	18,954
C. Payment to transition liability/(surplus)	165
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.87%
B. Actual employer payroll	19,764
C. Payment to transition liability/(surplus)	172
4. Supplemental payment to transition liability	0
5. Interest	302
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$4,081**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	4,081	4,116
2. Combined valuation payroll	40,681	38,620
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.89%**	**0.92%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	40,681	38,620
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Lowell Rural Fire Protection District/2700
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lowell Rural Fire Protection District/2700

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lowell Rural Fire Protection District/2700

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lowell Rural Fire Protection District -- #2700

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Lowell Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lowell Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lowell Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(33.64%)	(33.64%)	(33.64%)	(33.64%)	(33.64%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.41%	0.00%	4.41%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lowell Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$44,254	$67,586
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(163,887)	(164,408)
Allocated pooled OPSRP UAL	3,046	723
Side account	0	0
Net unfunded pension actuarial accrued liability	(116,587)	(96,099)
Combined valuation payroll	43,222	42,396
Net pension UAL as a percentage of payroll	(270%)	(227%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(33.64%)	(33.36%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$907	$1,098
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	43,222	7,732	15.06%	42,396	6,385
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**43,222**	**7,732**		**42,396**	**6,385**
Total		**$43,222**	**$7,732**		**$42,396**	**$6,385**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($164,408)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(17.55%)
B. Actual employer payroll	35,362
C. Payment to transition liability/(surplus)	(6,206)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(17.55%)
B. Actual employer payroll	36,779
C. Payment to transition liability/(surplus)	(6,455)
4. Supplemental payment to transition liability	0
5. Interest	(12,140)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($163,887)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(163,887)	(164,408)
2. Combined valuation payroll	43,222	42,396
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(33.64%)**	**(33.36%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	43,222	42,396
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Local Government Personnel Institute/2572
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Local Government Personnel Institute/2572

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Local Government Personnel Institute/2572

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Local Government Personnel Institute -- #2572

December 2013

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Executive Summary

Milliman has prepared this report for Local Government Personnel Institute to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Local Government Personnel Institute.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Local Government Personnel Institute

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.73%	12.73%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.41%	0.41%	0.41%	0.41%	0.41%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.22%**	**16.22%**	**20.21%**	**10.85%**	**14.95%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.78%**	**16.78%**	**20.77%**	**11.33%**	**15.43%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.03%	15.03%	20.50%	11.27%	13.98%
July 1, 2013 to June 30, 2015	14.12%	14.12%	21.88%	13.06%	15.79%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Local Government Personnel Institute

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$498,485	$622,027
Allocated pre-SLGRP pooled liability/(surplus)	(96,470)	(79,620)
Transition liability/(surplus)	22,742	24,691
Allocated pooled OPSRP UAL	34,316	6,658
Side account	0	0
Net unfunded pension actuarial accrued liability	459,073	573,756
Combined valuation payroll	486,864	390,193
Net pension UAL as a percentage of payroll	94%	147%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.41%	0.54%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,215	$10,108
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$104,165	$16,458	5.78%	$98,871	$5,715
Tier 2 General Service	10.58%	149,327	15,799	10.42%	49,681	5,177
Total General Service		**253,492**	**32,257**		**148,552**	**10,892**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$253,492**	**$32,257**		**$148,552**	**$10,892**
Employer normal cost rate						
General Service			**12.73%**			**7.33%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.73%**			**7.33%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$24,691
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.66%
B. Actual employer payroll	263,820
C. Payment to transition liability/(surplus)	1,741
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.66%
B. Actual employer payroll	286,704
C. Payment to transition liability/(surplus)	1,893
4. Supplemental payment to transition liability	0
5. Interest	1,685
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$22,742**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	22,742	24,691
2. Combined valuation payroll	486,864	390,193
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.41%**	**0.54%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	486,864	390,193
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Linn-Benton Housing Authority/2753
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Linn-Benton Housing Authority/2753

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Linn-Benton Housing Authority/2753

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Linn-Benton Housing Authority -- #2753

December 2013

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Executive Summary

Milliman has prepared this report for Linn-Benton Housing Authority to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Linn-Benton Housing Authority.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Linn-Benton Housing Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.84%	11.84%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.41%)	(9.41%)	(9.41%)	(9.41%)	(9.41%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**7.27%**	**7.27%**	**12.15%**	**2.79%**	**6.89%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**7.83%**	**7.83%**	**12.71%**	**3.27%**	**7.37%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.86%	7.86%	14.23%	5.00%	7.71%
July 1, 2013 to June 30, 2015	6.76%	6.76%	12.80%	3.98%	6.71%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Linn-Benton Housing Authority

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$962,552	$1,614,900
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(996,993)	(999,198)
Allocated pooled OPSRP UAL	66,262	17,284
Side account	0	0
Net unfunded pension actuarial accrued liability	31,821	632,986
Combined valuation payroll	940,112	1,013,015
Net pension UAL as a percentage of payroll	3%	62%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.41%)	(8.48%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,724	$26,243
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$165,318	$26,120	5.78%	$199,635	$11,539
Tier 2 General Service	10.58%	519,366	54,949	10.42%	478,358	49,845
Total General Service		**684,684**	**81,069**		**677,993**	**61,384**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$684,684**	**$81,069**		**$677,993**	**$61,384**
Employer normal cost rate						
General Service			**11.84%**			**9.05%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.84%**			**9.05%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($999,198)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.31%)
B. Actual employer payroll	514,133
C. Payment to transition liability/(surplus)	(37,583)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.31%)
B. Actual employer payroll	526,301
C. Payment to transition liability/(surplus)	(38,473)
4. Supplemental payment to transition liability	0
5. Interest	(73,851)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($996,993)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(996,993)	(999,198)
2. Combined valuation payroll	940,112	1,013,015
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.41%)**	**(8.48%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	940,112	1,013,015
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Linn-Benton Community College/2910
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Linn-Benton Community College/2910

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Linn-Benton Community College/2910

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Linn-Benton Community College -- #2910

December 2013

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Executive Summary

Milliman has prepared this report for Linn-Benton Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Linn-Benton Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Linn-Benton Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(8.44%)	(8.44%)	(8.44%)	(8.44%)	(8.44%)
Net pension contribution rate	**11.40%**	**11.40%**	**14.97%**	**5.61%**	**9.71%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.96%**	**11.96%**	**15.53%**	**6.09%**	**10.19%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.53%	7.53%	15.19%	5.96%	8.67%
July 1, 2013 to June 30, 2015	7.97%	7.97%	14.99%	6.17%	8.90%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Linn-Benton Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$26,898,095	$41,766,869
Allocated pre-SLGRP pooled liability/(surplus)	5,477,258	5,676,494
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	1,851,655	447,035
Side account	24,980,515	24,583,127
Net unfunded pension actuarial accrued liability	9,246,493	23,307,271
Combined valuation payroll	26,271,032	26,200,059
Net pension UAL as a percentage of payroll	35%	89%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(8.44%)	(8.07%)
Allocated pooled RHIA UAL	$551,177	$678,726
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$24,583,127**	**$24,583,127**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(2,991,597)	(2,991,597)
5. Side account earnings during 2012		3,389,985	3,389,985
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$24,980,515**	**$24,980,515**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$24,980,515	$24,583,127
Side Account 2	0	0
Side Account 3	0	0
Total	**$24,980,515**	**$24,583,127**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$24,980,515	$24,583,127
2. Combined valuation payroll	26,271,032	26,200,059
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(8.44%)	(8.07%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Lincoln County/2043
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lincoln County/2043

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lincoln County/2043

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lincoln County -- #2043

December 2013

Secondary Employers

2051 Lincoln County Non-Part

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Lincoln County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lincoln County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lincoln County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.89%	15.80%	16.98%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(9.19%)	(9.19%)	(9.19%)	(9.19%)	(9.19%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.78%**	**9.69%**	**10.87%**	**1.25%**	**5.35%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.34%**	**10.25%**	**11.43%**	**1.73%**	**5.83%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.36%	2.48%	10.36%	1.03%	3.74%
July 1, 2013 to June 30, 2015	10.85%	3.69%	10.85%	2.04%	4.77%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lincoln County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,354,945	$6,770,214
Allocated pre-SLGRP pooled liability/(surplus)	(842,800)	(866,597)
Transition liability/(surplus)	(4,404,725)	(4,494,742)
Allocated pooled OPSRP UAL	299,793	72,462
Side account	0	0
Net unfunded pension actuarial accrued liability	(592,787)	1,481,337
Combined valuation payroll	4,253,420	4,246,907
Net pension UAL as a percentage of payroll	(14%)	35%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(9.19%)	(9.10%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$89,239	$110,018
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$207,706	$32,818	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**207,706**	**32,818**		**0**	**0**
Tier 1 Police & Fire	17.89%	1,378,071	246,537	15.06%	1,681,521	253,237
Tier 2 Police & Fire	15.70%	978,397	153,608	15.12%	923,752	139,671
Total Police & Fire		**2,356,468**	**400,145**		**2,605,273**	**392,908**
Total		**$2,564,174**	**$432,963**		**$2,605,273**	**$392,908**
Employer normal cost rate						
General Service			**15.80%**			**7.92%**
Police & Fire			**16.98%**			**15.08%**
Aggregate (Default)			**16.89%**			**15.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($4,494,742)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.58%)
B. Actual employer payroll	2,144,958
C. Payment to transition liability/(surplus)	(205,487)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.58%)
B. Actual employer payroll	2,200,486
C. Payment to transition liability/(surplus)	(210,806)
4. Supplemental payment to transition liability	0
5. Interest	(326,276)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($4,404,725)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(4,404,725)	(4,494,742)
2. Combined valuation payroll	4,253,420	4,246,907
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.19%)**	**(9.10%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	4,253,420	4,246,907
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Lebanon Fire District/2705
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lebanon Fire District/2705

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lebanon Fire District/2705

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lebanon Fire District -- #2705

December 2013

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Executive Summary

Milliman has prepared this report for Lebanon Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lebanon Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lebanon Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.48%	15.80%	17.52%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.75%)	(3.75%)	(3.75%)	(3.75%)	(3.75%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.57%**	**16.89%**	**18.61%**	**8.45%**	**12.55%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.13%**	**17.45%**	**19.17%**	**8.93%**	**13.03%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.36%	8.56%	17.60%	8.08%	10.79%
July 1, 2013 to June 30, 2015	17.86%	8.77%	18.06%	9.26%	11.99%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lebanon Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,758,322	$4,209,388
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,138,025)	(1,165,663)
Allocated pooled OPSRP UAL	189,882	45,054
Side account	0	0
Net unfunded pension actuarial accrued liability	1,810,179	3,088,779
Combined valuation payroll	2,694,019	2,640,519
Net pension UAL as a percentage of payroll	67%	117%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.75%)	(3.80%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$56,522	$68,404
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$39,592	$6,256	5.78%	$38,953	$2,251
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**39,592**	**6,256**		**38,953**	**2,251**
Tier 1 Police & Fire	17.89%	1,481,987	265,127	15.06%	1,534,744	231,132
Tier 2 Police & Fire	15.70%	304,208	47,761	15.12%	277,612	41,975
Total Police & Fire		**1,786,195**	**312,888**		**1,812,356**	**273,107**
Total		**$1,825,787**	**$319,144**		**$1,851,309**	**$275,358**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**17.52%**			**15.07%**
Aggregate (Default)			**17.48%**			**14.87%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,165,663)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.23%)
B. Actual employer payroll	1,281,532
C. Payment to transition liability/(surplus)	(54,209)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.23%)
B. Actual employer payroll	1,364,706
C. Payment to transition liability/(surplus)	(57,727)
4. Supplemental payment to transition liability	0
5. Interest	(84,298)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,138,025)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,138,025)	(1,165,663)
2. Combined valuation payroll	2,694,019	2,640,519
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.75%)**	**(3.80%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,694,019	2,640,519
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Lebanon Aquatic District/2849
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lebanon Aquatic District/2849

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lebanon Aquatic District/2849

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lebanon Aquatic District -- #2849

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Lebanon Aquatic District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lebanon Aquatic District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lebanon Aquatic District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.67%	15.67%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.28%)	(2.28%)	(2.28%)	(2.28%)	(2.28%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.23%**	**18.23%**	**19.28%**	**9.92%**	**14.02%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.79%**	**18.79%**	**19.84%**	**10.40%**	**14.50%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.38%	1.38%	10.94%	1.71%	4.42%
July 1, 2013 to June 30, 2015	6.09%	6.09%	15.31%	6.49%	9.22%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lebanon Aquatic District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$223,052	$176,917
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(56,106)	(76,863)
Allocated pooled OPSRP UAL	15,355	1,894
Side account	0	0
Net unfunded pension actuarial accrued liability	182,301	101,948
Combined valuation payroll	217,852	110,979
Net pension UAL as a percentage of payroll	84%	92%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.28%)	(5.96%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,571	$2,875
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$72,012	$11,378	5.78%	$64,609	$3,734
Tier 2 General Service	10.58%	1,790	189	10.42%	1,275	133
Total General Service		**73,802**	**11,567**		**65,884**	**3,867**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$73,802**	**$11,567**		**$65,884**	**$3,867**
Employer normal cost rate						
General Service			**15.67%**			**5.87%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.67%**			**5.87%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($76,863)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(10.60%)
B. Actual employer payroll	103,944
C. Payment to transition liability/(surplus)	(11,018)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(10.60%)
B. Actual employer payroll	131,080
C. Payment to transition liability/(surplus)	(13,895)
4. Supplemental payment to transition liability	0
5. Interest	(4,156)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($56,106)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(56,106)	(76,863)
2. Combined valuation payroll	217,852	110,979
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.28%)**	**(5.96%)**

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	217,852	110,979
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Lane County Fire District #1/2635
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lane County Fire District #1/2635

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lane County Fire District #1/2635

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lane County Fire District #1 -- #2635

December 2013

Secondary Employers

2609 Elmira-Noti Rural Fire Protection District

2636 Crow Valley Rural Fire Protection District

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Executive Summary

Milliman has prepared this report for Lane County Fire District #1 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lane County Fire District #1.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lane County Fire District #1

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.18%	15.80%	17.43%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.91%)	(1.91%)	(1.91%)	(1.91%)	(1.91%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.11%**	**18.73%**	**20.36%**	**10.29%**	**14.39%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.67%**	**19.29%**	**20.92%**	**10.77%**	**14.87%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	N/A	N/A	N/A	N/A	N/A
July 1, 2013 to June 30, 2015	17.52%	9.55%	18.84%	10.04%	12.77%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lane County Fire District #1

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$550,140	$710,521
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(126,794)	(131,849)
Allocated pooled OPSRP UAL	37,871	7,605
Side account	0	0
Net unfunded pension actuarial accrued liability	461,217	586,277
Combined valuation payroll	537,315	445,691
Net pension UAL as a percentage of payroll	86%	132%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.91%)	(2.34%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$11,273	$11,546
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$56,745	$8,966	5.78%	$50,214	$2,902
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**56,745**	**8,966**		**50,214**	**2,902**
Tier 1 Police & Fire	17.89%	249,147	44,572	15.06%	234,784	35,358
Tier 2 Police & Fire	15.70%	66,899	10,503	15.12%	68,351	10,335
Total Police & Fire		**316,046**	**55,075**		**303,135**	**45,693**
Total		**$372,791**	**$64,041**		**$353,349**	**$48,595**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**17.43%**			**15.07%**
Aggregate (Default)			**17.18%**			**13.75%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($131,849)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.34%)
B. Actual employer payroll	285,346
C. Payment to transition liability/(surplus)	(6,677)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.34%)
B. Actual employer payroll	332,027
C. Payment to transition liability/(surplus)	(7,770)
4. Supplemental payment to transition liability	0
5. Interest	(9,392)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($126,794)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(126,794)	(131,849)
2. Combined valuation payroll	537,315	445,691
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.91%)**	**(2.34%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	537,315	445,691
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Lane Council of Governments/2522
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lane Council of Governments/2522

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lane Council of Governments/2522

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lane Council of Governments -- #2522

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Lane Council of Governments to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lane Council of Governments.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lane Council of Governments

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.03%	14.03%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.70%)	(1.70%)	(1.70%)	(1.70%)	(1.70%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.17%**	**17.17%**	**19.86%**	**10.50%**	**14.60%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.73%**	**17.73%**	**20.42%**	**10.98%**	**15.08%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.93%	11.93%	19.97%	10.74%	13.45%
July 1, 2013 to June 30, 2015	12.04%	12.04%	19.68%	10.86%	13.59%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lane Council of Governments

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$8,770,338	$14,894,419
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,637,685)	(1,665,168)
Allocated pooled OPSRP UAL	603,747	159,417
Side account	0	0
Net unfunded pension actuarial accrued liability	7,736,400	13,388,668
Combined valuation payroll	8,565,879	9,343,163
Net pension UAL as a percentage of payroll	90%	143%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.70%)	(1.53%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$179,716	$242,039
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$3,566,934	$563,576	5.78%	$3,935,399	$227,466
Tier 2 General Service	10.58%	1,822,414	192,811	10.42%	2,204,925	229,753
Total General Service		**5,389,348**	**756,387**		**6,140,324**	**457,219**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$5,389,348**	**$756,387**		**$6,140,324**	**$457,219**
Employer normal cost rate						
General Service			**14.03%**			**7.45%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.03%**			**7.45%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,665,168)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.57%)
B. Actual employer payroll	4,825,882
C. Payment to transition liability/(surplus)	(75,766)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.57%)
B. Actual employer payroll	4,651,370
C. Payment to transition liability/(surplus)	(73,027)
4. Supplemental payment to transition liability	0
5. Interest	(121,310)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,637,685)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,637,685)	(1,665,168)
2. Combined valuation payroll	8,565,879	9,343,163
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.70%)**	**(1.53%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	8,565,879	9,343,163
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Lane Community College/2904
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lane Community College/2904

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lane Community College/2904

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lane Community College -- #2904

December 2013

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Executive Summary

Milliman has prepared this report for Lane Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lane Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lane Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(9.37%)	(9.37%)	(9.37%)	(9.37%)	(9.37%)
Net pension contribution rate	**10.47%**	**10.47%**	**14.04%**	**4.68%**	**8.78%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.03%**	**11.03%**	**14.60%**	**5.16%**	**9.26%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.06%	6.06%	13.72%	4.49%	7.20%
July 1, 2013 to June 30, 2015	7.21%	7.21%	14.23%	5.41%	8.14%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lane Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$53,945,265	$82,843,565
Allocated pre-SLGRP pooled liability/(surplus)	10,984,873	11,259,187
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	3,713,572	886,683
Side account	55,630,177	53,318,929
Net unfunded pension actuarial accrued liability	13,013,533	41,670,506
Combined valuation payroll	52,687,664	51,967,178
Net pension UAL as a percentage of payroll	25%	80%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(9.37%)	(8.83%)
Allocated pooled RHIA UAL	$1,105,410	$1,346,236
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$53,318,929**	**$53,318,929**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(5,160,475)	(5,160,475)
5. Side account earnings during 2012		7,472,723	7,472,723
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$55,630,177**	**$55,630,177**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$55,630,177	$53,318,929
Side Account 2	0	0
Side Account 3	0	0
Total	**$55,630,177**	**$53,318,929**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$55,630,177	$53,318,929
2. Combined valuation payroll	52,687,664	51,967,178
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(9.37%)	(8.83%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Lake County/2000
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lake County/2000

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lake County/2000

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lake County -- #2000

December 2013

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Executive Summary

Milliman has prepared this report for Lake County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lake County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lake County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.77%	12.68%	16.31%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.54%)	(2.54%)	(2.54%)	(2.54%)	(2.54%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.31%**	**13.22%**	**16.85%**	**7.90%**	**12.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.87%**	**13.78%**	**17.41%**	**8.38%**	**12.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.63%	9.65%	16.84%	7.87%	10.58%
July 1, 2013 to June 30, 2015	12.16%	10.26%	16.98%	8.14%	10.87%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lake County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,727,553	$5,883,301
Allocated pre-SLGRP pooled liability/(surplus)	(721,382)	(753,071)
Transition liability/(surplus)	(1,043,465)	(1,063,381)
Allocated pooled OPSRP UAL	256,603	62,970
Side account	0	0
Net unfunded pension actuarial accrued liability	2,219,309	4,129,819
Combined valuation payroll	3,640,654	3,690,553
Net pension UAL as a percentage of payroll	61%	112%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.54%)	(2.48%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$76,382	$95,606
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$484,498	$76,551	5.78%	$591,300	$34,177
Tier 2 General Service	10.58%	722,384	76,428	10.42%	757,194	78,900
Total General Service		**1,206,882**	**152,979**		**1,348,494**	**113,077**
Tier 1 Police & Fire	17.89%	144,282	25,812	15.06%	124,241	18,711
Tier 2 Police & Fire	15.70%	376,976	59,185	15.12%	407,343	61,590
Total Police & Fire		**521,258**	**84,997**		**531,584**	**80,301**
Total		**$1,728,140**	**$237,976**		**$1,880,078**	**$193,378**
Employer normal cost rate						
General Service			**12.68%**			**8.39%**
Police & Fire			**16.31%**			**15.11%**
Aggregate (Default)			**13.77%**			**10.29%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,063,381)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.74%)
B. Actual employer payroll	1,727,647
C. Payment to transition liability/(surplus)	(47,338)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.74%)
B. Actual employer payroll	1,820,143
C. Payment to transition liability/(surplus)	(49,872)
4. Supplemental payment to transition liability	0
5. Interest	(77,294)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,043,465)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,043,465)	(1,063,381)
2. Combined valuation payroll	3,640,654	3,690,553
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.54%)**	**(2.48%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,640,654	3,690,553
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Lake County Library District/2768
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Lake County Library District/2768

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lake County Library District/2768

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lake County Library District -- #2768

December 2013

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Executive Summary

Milliman has prepared this report for Lake County Library District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lake County Library District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lake County Library District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.90%	0.90%	0.90%	0.90%	0.90%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.78%**	**19.78%**	**20.70%**	**11.34%**	**15.44%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.34%**	**20.34%**	**21.26%**	**11.82%**	**15.92%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.44%	11.44%	21.00%	11.77%	14.48%
July 1, 2013 to June 30, 2015	11.26%	11.26%	20.57%	11.75%	14.48%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lake County Library District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$110,876	$160,823
Allocated pre-SLGRP pooled liability/(surplus)	(21,457)	(20,586)
Transition liability/(surplus)	11,006	11,390
Allocated pooled OPSRP UAL	7,633	1,721
Side account	0	0
Net unfunded pension actuarial accrued liability	108,058	153,348
Combined valuation payroll	108,291	100,883
Net pension UAL as a percentage of payroll	100%	152%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.90%	0.97%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,272	$2,613
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$27,560	$4,354	5.78%	$27,056	$1,564
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**27,560**	**4,354**		**27,056**	**1,564**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$27,560**	**$4,354**		**$27,056**	**$1,564**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$11,390
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.16%
B. Actual employer payroll	49,804
C. Payment to transition liability/(surplus)	578
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.16%
B. Actual employer payroll	53,544
C. Payment to transition liability/(surplus)	621
4. Supplemental payment to transition liability	0
5. Interest	815
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$11,006**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	11,006	11,390
2. Combined valuation payroll	108,291	100,883
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.90%**	**0.97%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	108,291	100,883
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Lake County 4-H & Extension Service/2850
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Lake County 4-H & Extension Service/2850

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Lake County 4-H & Extension Service/2850

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Lake County 4-H & Extension Service -- #2850

December 2013

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Executive Summary

Milliman has prepared this report for Lake County 4-H & Extension Service to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Lake County 4-H & Extension Service.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Lake County 4-H & Extension Service

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.75%)	(9.75%)	(9.75%)	(9.75%)	(9.75%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.89%**	**10.89%**	**11.81%**	**2.45%**	**6.55%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.45%**	**11.45%**	**12.37%**	**2.93%**	**7.03%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	2.08%	2.08%	11.64%	2.41%	5.12%
July 1, 2013 to June 30, 2015	2.13%	2.13%	11.44%	2.62%	5.35%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Lake County 4-H & Extension Service

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$37,818	$56,806
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(40,597)	(41,105)
Allocated pooled OPSRP UAL	2,603	608
Side account	0	0
Net unfunded pension actuarial accrued liability	(176)	16,309
Combined valuation payroll	36,936	35,634
Net pension UAL as a percentage of payroll	0%	46%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.75%)	(9.92%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$775	$923
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$36,936	$5,836	5.78%	$35,634	$2,060
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**36,936**	**5,836**		**35,634**	**2,060**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$36,936**	**$5,836**		**$35,634**	**$2,060**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($41,105)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.90%)
B. Actual employer payroll	17,500
C. Payment to transition liability/(surplus)	(1,733)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.90%)
B. Actual employer payroll	18,008
C. Payment to transition liability/(surplus)	(1,782)
4. Supplemental payment to transition liability	0
5. Interest	(3,007)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($40,597)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(40,597)	(41,105)
2. Combined valuation payroll	36,936	35,634
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.75%)**	**(9.92%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	36,936	35,634
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

La Pine Rural Fire Protection District/2579
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
La Pine Rural Fire Protection District/2579

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
La Pine Rural Fire Protection District/2579

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

La Pine Rural Fire Protection District -- #2579

December 2013

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Executive Summary

Milliman has prepared this report for La Pine Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to La Pine Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for La Pine Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.03%	10.58%	16.40%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.21%)	(5.21%)	(5.21%)	(5.21%)	(5.21%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.66%**	**10.21%**	**16.03%**	**6.99%**	**11.09%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.22%**	**10.77%**	**16.59%**	**7.47%**	**11.57%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.89%	8.05%	13.28%	4.29%	7.00%
July 1, 2013 to June 30, 2015	15.79%	11.40%	16.08%	7.25%	9.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

La Pine Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,843,250	$2,945,098
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,056,627)	(1,114,481)
Allocated pooled OPSRP UAL	126,889	31,522
Side account	0	0
Net unfunded pension actuarial accrued liability	913,512	1,862,139
Combined valuation payroll	1,800,279	1,847,439
Net pension UAL as a percentage of payroll	51%	101%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.21%)	(5.19%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$37,771	$47,859
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	56,470	5,975	10.42%	59,931	6,245
Total General Service		**56,470**	**5,975**		**59,931**	**6,245**
Tier 1 Police & Fire	17.89%	268,656	48,063	15.06%	283,277	42,662
Tier 2 Police & Fire	15.70%	572,273	89,847	15.12%	609,308	92,127
Total Police & Fire		**840,929**	**137,910**		**892,585**	**134,789**
Total		**$897,399**	**$143,885**		**$952,516**	**$141,034**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.40%**			**15.10%**
Aggregate (Default)			**16.03%**			**14.81%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,114,481)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.02%)
B. Actual employer payroll	817,798
C. Payment to transition liability/(surplus)	(65,587)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.02%)
B. Actual employer payroll	879,500
C. Payment to transition liability/(surplus)	(70,536)
4. Supplemental payment to transition liability	0
5. Interest	(78,269)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,056,627)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,056,627)	(1,114,481)
2. Combined valuation payroll	1,800,279	1,847,439
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.21%)**	**(5.19%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,800,279	1,847,439
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Klamath Vector Control/2624
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Klamath Vector Control/2624

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Klamath Vector Control/2624

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath Vector Control -- #2624

December 2013

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Executive Summary

Milliman has prepared this report for Klamath Vector Control to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath Vector Control.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Klamath Vector Control

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.92%	1.92%	1.92%	1.92%	1.92%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.80%**	**20.80%**	**21.72%**	**12.36%**	**16.46%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.36%**	**21.36%**	**22.28%**	**12.84%**	**16.94%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.83%	17.52%	25.30%	16.07%	18.78%
July 1, 2013 to June 30, 2015	14.02%	14.02%	23.33%	14.51%	17.24%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath Vector Control

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$141,516	$217,375
Allocated pre-SLGRP pooled liability/(surplus)	(27,387)	(27,824)
Transition liability/(surplus)	29,905	31,545
Allocated pooled OPSRP UAL	9,742	2,327
Side account	0	0
Net unfunded pension actuarial accrued liability	153,776	223,423
Combined valuation payroll	138,217	136,358
Net pension UAL as a percentage of payroll	111%	164%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.92%	1.99%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,900	$3,532
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$92,098	$14,551	5.78%	$90,757	$5,246
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**92,098**	**14,551**		**90,757**	**5,246**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$92,098**	**$14,551**		**$90,757**	**$5,246**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$31,545
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.92%
B. Actual employer payroll	66,015
C. Payment to transition liability/(surplus)	1,928
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.92%
B. Actual employer payroll	66,015
C. Payment to transition liability/(surplus)	1,927
4. Supplemental payment to transition liability	0
5. Interest	2,215
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$29,905**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	29,905	31,545
2. Combined valuation payroll	138,217	136,358
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.92%**	**1.99%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	138,217	136,358
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Klamath Housing Authority/2721
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Klamath Housing Authority/2721

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Klamath Housing Authority/2721

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath Housing Authority -- #2721

December 2013

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Executive Summary

Milliman has prepared this report for Klamath Housing Authority to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath Housing Authority.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Klamath Housing Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.40%	13.40%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.53%)	(3.53%)	(3.53%)	(3.53%)	(3.53%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.71%**	**14.71%**	**18.03%**	**8.67%**	**12.77%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.27%**	**15.27%**	**18.59%**	**9.15%**	**13.25%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.43%	10.43%	18.10%	8.87%	11.58%
July 1, 2013 to June 30, 2015	10.59%	10.59%	17.76%	8.94%	11.67%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath Housing Authority

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$559,254	$875,693
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(217,457)	(219,518)
Allocated pooled OPSRP UAL	38,499	9,373
Side account	0	0
Net unfunded pension actuarial accrued liability	380,296	665,548
Combined valuation payroll	546,216	549,316
Net pension UAL as a percentage of payroll	70%	121%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.53%)	(3.44%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$11,460	$14,230
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$97,324	$15,377	5.78%	$96,561	$5,581
Tier 2 General Service	10.58%	82,690	8,749	10.42%	82,953	8,644
Total General Service		**180,014**	**24,126**		**179,514**	**14,225**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$180,014**	**$24,126**		**$179,514**	**$14,225**
Employer normal cost rate						
General Service			**13.40%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.40%**			**7.92%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($219,518)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.44%)
B. Actual employer payroll	257,860
C. Payment to transition liability/(surplus)	(8,870)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.44%)
B. Actual employer payroll	270,280
C. Payment to transition liability/(surplus)	(9,299)
4. Supplemental payment to transition liability	0
5. Interest	(16,108)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($217,457)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(217,457)	(219,518)
2. Combined valuation payroll	546,216	549,316
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.53%)**	**(3.44%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	546,216	549,316
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Klamath County/2007
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Klamath County/2007

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Klamath County/2007

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath County -- #2007

December 2013

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Executive Summary

Milliman has prepared this report for Klamath County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Klamath County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.54%	13.34%	16.54%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(14.34%)	(14.34%)	(14.34%)	(14.34%)	(14.34%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**7.04%**	**3.84%**	**7.04%**	**0.00%**	**1.96%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**7.60%**	**4.40%**	**7.60%**	**0.48%**	**2.44%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.39%	2.71%	10.39%	1.26%	3.97%
July 1, 2013 to June 30, 2015	4.10%	0.00%	4.10%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,821,811	$4,710,313
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(6,032,516)	(5,979,763)
Allocated pooled OPSRP UAL	263,092	50,415
Side account	0	0
Net unfunded pension actuarial accrued liability	(1,947,613)	(1,219,035)
Combined valuation payroll	3,732,715	2,954,746
Net pension UAL as a percentage of payroll	(52%)	(41%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(14.34%)	(17.41%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$78,314	$76,544
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	1,038,251	185,743	15.06%	922,472	138,924
Tier 2 Police & Fire	15.70%	1,662,466	261,007	15.12%	1,541,770	233,116
Total Police & Fire		**2,700,717**	**446,750**		**2,464,242**	**372,040**
Total		**$2,700,717**	**$446,750**		**$2,464,242**	**$372,040**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.54%**			**15.10%**
Aggregate (Default)			**16.54%**			**15.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($5,979,763)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(11.05%)
B. Actual employer payroll	1,702,846
C. Payment to transition liability/(surplus)	(188,164)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(11.05%)
B. Actual employer payroll	1,863,671
C. Payment to transition liability/(surplus)	(205,936)
4. Supplemental payment to transition liability	0
5. Interest	(446,853)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($6,032,516)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(6,032,516)	(5,979,763)
2. Combined valuation payroll	3,732,715	2,954,746
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(14.34%)**	**(17.41%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,732,715	2,954,746
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Klamath County Emergency Communications District/2710
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Klamath County Emergency Communications District/2710

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Klamath County Emergency Communications District/2710

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath County Emergency Communications District -- #2710

December 2013

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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Executive Summary

Milliman has prepared this report for Klamath County Emergency Communications District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath County Emergency Communications District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Klamath County Emergency Communications District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.26%	13.26%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.48%	1.48%	1.48%	1.48%	1.48%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.82%**	**17.82%**	**21.28%**	**11.92%**	**16.02%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.38%**	**18.38%**	**21.84%**	**12.40%**	**16.50%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.56%	13.56%	21.34%	12.11%	14.82%
July 1, 2013 to June 30, 2015	13.55%	13.55%	21.16%	12.34%	15.07%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath County Emergency Communications District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$703,668	$1,087,557
Allocated pre-SLGRP pooled liability/(surplus)	(136,179)	(139,209)
Transition liability/(surplus)	114,769	117,001
Allocated pooled OPSRP UAL	48,440	11,640
Side account	0	0
Net unfunded pension actuarial accrued liability	730,698	1,076,989
Combined valuation payroll	687,264	682,217
Net pension UAL as a percentage of payroll	106%	158%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.48%	1.48%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$14,419	$17,673
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$113,986	$18,010	5.78%	$199,859	$11,552
Tier 2 General Service	10.58%	107,860	11,412	10.42%	115,087	11,992
Total General Service		**221,846**	**29,422**		**314,946**	**23,544**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$221,846**	**$29,422**		**$314,946**	**$23,544**
Employer normal cost rate						
General Service			**13.26%**			**7.48%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.26%**			**7.48%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$117,001
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.50%
B. Actual employer payroll	358,767
C. Payment to transition liability/(surplus)	5,381
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.50%
B. Actual employer payroll	356,791
C. Payment to transition liability/(surplus)	5,352
4. Supplemental payment to transition liability	0
5. Interest	8,501
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$114,769**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	114,769	117,001
2. Combined valuation payroll	687,264	682,217
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.48%**	**1.48%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	687,264	682,217
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Klamath Community College/2906
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Klamath Community College/2906

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Klamath Community College/2906

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Klamath Community College -- #2906

December 2013

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Executive Summary

Milliman has prepared this report for Klamath Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Klamath Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Klamath Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(0.78%)	(0.78%)	(0.78%)	(0.78%)	(0.78%)
Net pension contribution rate	**19.06%**	**19.06%**	**22.63%**	**13.27%**	**17.37%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.62%**	**19.62%**	**23.19%**	**13.75%**	**17.85%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.73%	14.73%	22.39%	13.16%	15.87%
July 1, 2013 to June 30, 2015	15.18%	15.18%	22.20%	13.38%	16.11%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Klamath Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,478,717	$6,005,847
Allocated pre-SLGRP pooled liability/(surplus)	912,001	816,249
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	308,313	64,281
Side account	382,718	374,752
Net unfunded pension actuarial accrued liability	5,316,313	6,511,625
Combined valuation payroll	4,374,307	3,767,425
Net pension UAL as a percentage of payroll	122%	173%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(0.78%)	(0.86%)
Allocated pooled RHIA UAL	$91,775	$97,597
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$374,752**	**$374,752**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(42,951)	(42,951)
5. Side account earnings during 2012		51,917	51,917
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$382,718**	**$382,718**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$382,718	$374,752
Side Account 2	0	0
Side Account 3	0	0
Total	**$382,718**	**$374,752**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$382,718	$374,752
2. Combined valuation payroll	4,374,307	3,767,425
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(0.78%)	(0.86%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Keizer Fire Department/2559
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Keizer Fire Department/2559

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Keizer Fire Department/2559

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Keizer Fire Department -- #2559

December 2013

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Keizer Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Keizer Fire Department.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Keizer Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.48%	15.80%	16.54%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(6.12%)	(6.12%)	(6.12%)	(6.12%)	(6.12%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.20%**	**14.52%**	**15.26%**	**6.08%**	**10.18%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.76%**	**15.08%**	**15.82%**	**6.56%**	**10.66%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.44%	9.43%	14.80%	5.67%	8.38%
July 1, 2013 to June 30, 2015	15.14%	10.84%	15.52%	6.69%	9.42%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Keizer Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,923,444	$3,017,034
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,295,516)	(1,321,932)
Allocated pooled OPSRP UAL	132,409	32,292
Side account	0	0
Net unfunded pension actuarial accrued liability	760,337	1,727,394
Combined valuation payroll	1,878,604	1,892,564
Net pension UAL as a percentage of payroll	40%	91%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(6.12%)	(6.01%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$39,414	$49,028
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$71,524	$11,301	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	82,142	8,559
Total General Service		**71,524**	**11,301**		**82,142**	**8,559**
Tier 1 Police & Fire	17.89%	304,107	54,405	15.06%	295,798	44,547
Tier 2 Police & Fire	15.70%	484,161	76,013	15.12%	630,606	95,348
Total Police & Fire		**788,268**	**130,418**		**926,404**	**139,895**
Total		**$859,792**	**$141,719**		**$1,008,546**	**$148,454**
Employer normal cost rate						
General Service			**15.80%**			**10.42%**
Police & Fire			**16.54%**			**15.10%**
Aggregate (Default)			**16.48%**			**14.72%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,321,932)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.64%)
B. Actual employer payroll	870,941
C. Payment to transition liability/(surplus)	(57,830)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.64%)
B. Actual employer payroll	972,121
C. Payment to transition liability/(surplus)	(64,550)
4. Supplemental payment to transition liability	0
5. Interest	(95,964)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,295,516)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,295,516)	(1,321,932)
2. Combined valuation payroll	1,878,604	1,892,564
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.12%)**	**(6.01%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,878,604	1,892,564
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Junction City Fire Department/2763
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Junction City Fire Department/2763

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Junction City Fire Department/2763

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Junction City Fire Department -- #2763

December 2013

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Executive Summary

Milliman has prepared this report for Junction City Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Junction City Fire Department.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Junction City Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.85%	10.58%	16.94%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.87%)	(4.87%)	(4.87%)	(4.87%)	(4.87%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.82%**	**10.55%**	**16.91%**	**7.33%**	**11.43%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.38%**	**11.11%**	**17.47%**	**7.81%**	**11.91%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.17%	12.50%	18.03%	8.74%	11.45%
July 1, 2013 to June 30, 2015	17.14%	13.27%	17.94%	9.12%	11.85%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Junction City Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$184,674	$371,217
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(99,090)	(99,449)
Allocated pooled OPSRP UAL	12,713	3,973
Side account	0	0
Net unfunded pension actuarial accrued liability	98,297	275,741
Combined valuation payroll	180,369	232,862
Net pension UAL as a percentage of payroll	55%	118%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.87%)	(3.67%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,784	$6,032
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	24,694	2,613	10.42%	24,354	2,538
Total General Service		**24,694**	**2,613**		**24,354**	**2,538**
Tier 1 Police & Fire	17.89%	67,600	12,094	15.06%	66,617	10,033
Tier 2 Police & Fire	15.70%	52,272	8,207	15.12%	51,576	7,798
Total Police & Fire		**119,872**	**20,301**		**118,193**	**17,831**
Total		**$144,566**	**$22,914**		**$142,547**	**$20,369**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.94%**			**15.09%**
Aggregate (Default)			**15.85%**			**14.29%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($99,449)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.57%)
B. Actual employer payroll	112,025
C. Payment to transition liability/(surplus)	(3,999)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.57%)
B. Actual employer payroll	103,638
C. Payment to transition liability/(surplus)	(3,700)
4. Supplemental payment to transition liability	0
5. Interest	(7,340)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($99,090)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(99,090)	(99,449)
2. Combined valuation payroll	180,369	232,862
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.87%)**	**(3.67%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	180,369	232,862
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Josephine County/2042
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Josephine County/2042

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Josephine County/2042

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Josephine County -- #2042

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Josephine County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Josephine County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Josephine County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.52%	12.66%	16.25%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.20%	0.20%	0.20%	0.20%	0.20%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.80%**	**15.94%**	**19.53%**	**10.64%**	**14.74%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.36%**	**16.50%**	**20.09%**	**11.12%**	**15.22%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.76%	12.93%	19.86%	10.76%	13.47%
July 1, 2013 to June 30, 2015	14.77%	13.21%	19.79%	10.96%	13.69%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Josephine County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$15,309,203	$30,732,548
Allocated pre-SLGRP pooled liability/(surplus)	(2,962,745)	(3,933,812)
Transition liability/(surplus)	329,966	330,916
Allocated pooled OPSRP UAL	1,053,880	328,934
Side account	0	0
Net unfunded pension actuarial accrued liability	13,730,304	27,458,586
Combined valuation payroll	14,952,307	19,278,308
Net pension UAL as a percentage of payroll	92%	142%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.20%	0.15%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$313,706	$499,414
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,836,018	$448,091	5.78%	$3,669,255	$212,083
Tier 2 General Service	10.58%	4,285,396	453,395	10.42%	5,313,200	553,635
Total General Service		**7,121,414**	**901,486**		**8,982,455**	**765,718**
Tier 1 Police & Fire	17.89%	566,752	101,392	15.06%	761,561	114,691
Tier 2 Police & Fire	15.70%	1,677,776	263,411	15.12%	2,027,927	306,623
Total Police & Fire		**2,244,528**	**364,803**		**2,789,488**	**421,314**
Total		**$9,365,942**	**$1,266,289**		**$11,771,943**	**$1,187,032**
Employer normal cost rate						
General Service			**12.66%**			**8.52%**
Police & Fire			**16.25%**			**15.10%**
Aggregate (Default)			**13.52%**			**10.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$330,916
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.15%
B. Actual employer payroll	9,726,691
C. Payment to transition liability/(surplus)	14,590
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.15%
B. Actual employer payroll	7,201,317
C. Payment to transition liability/(surplus)	10,802
4. Supplemental payment to transition liability	0
5. Interest	24,442
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$329,966**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	329,966	330,916
2. Combined valuation payroll	14,952,307	19,278,308
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.20%**	**0.15%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	14,952,307	19,278,308
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Jefferson Rural Fire Protection District/2561
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Jefferson Rural Fire Protection District/2561

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Jefferson Rural Fire Protection District/2561

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jefferson Rural Fire Protection District -- #2561

December 2013

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Executive Summary

Milliman has prepared this report for Jefferson Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jefferson Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Jefferson Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.65%	12.15%	16.83%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(10.36%)	(10.36%)	(10.36%)	(10.36%)	(10.36%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.13%**	**6.63%**	**11.31%**	**1.84%**	**5.94%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.69%**	**7.19%**	**11.87%**	**2.32%**	**6.42%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.71%	5.69%	12.36%	3.29%	6.00%
July 1, 2013 to June 30, 2015	6.89%	2.99%	8.56%	0.00%	2.47%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jefferson Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$380,640	$469,419
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(434,137)	(432,661)
Allocated pooled OPSRP UAL	26,203	5,024
Side account	0	0
Net unfunded pension actuarial accrued liability	(27,294)	41,782
Combined valuation payroll	371,766	294,463
Net pension UAL as a percentage of payroll	(7%)	14%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(10.36%)	(12.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$7,800	$7,628
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$17,331	$2,738	5.78%	$12,475	$721
Tier 2 General Service	10.58%	40,442	4,279	10.42%	52,079	5,427
Total General Service		**57,773**	**7,017**		**64,554**	**6,148**
Tier 1 Police & Fire	17.89%	88,075	15,757	15.06%	79,234	11,933
Tier 2 Police & Fire	15.70%	82,165	12,900	15.12%	71,080	10,747
Total Police & Fire		**170,240**	**28,657**		**150,314**	**22,680**
Total		**$228,013**	**$35,674**		**$214,868**	**$28,828**
Employer normal cost rate						
General Service			**12.15%**			**9.52%**
Police & Fire			**16.83%**			**15.09%**
Aggregate (Default)			**15.65%**			**13.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($432,661)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.02%)
B. Actual employer payroll	170,457
C. Payment to transition liability/(surplus)	(15,375)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.02%)
B. Actual employer payroll	169,702
C. Payment to transition liability/(surplus)	(15,307)
4. Supplemental payment to transition liability	0
5. Interest	(32,158)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($434,137)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(434,137)	(432,661)
2. Combined valuation payroll	371,766	294,463
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(10.36%)**	**(12.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	371,766	294,463
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Jefferson County Library District/2846
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Jefferson County Library District/2846

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Jefferson County Library District/2846

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jefferson County Library District -- #2846

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Jefferson County Library District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jefferson County Library District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Jefferson County Library District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.09%	11.09%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(0.61%)	(0.61%)	(0.61%)	(0.61%)	(0.61%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.32%**	**15.32%**	**20.95%**	**11.59%**	**15.69%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.88%**	**15.88%**	**21.51%**	**12.07%**	**16.17%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.85%	14.85%	20.77%	11.54%	14.25%
July 1, 2013 to June 30, 2015	15.71%	15.71%	20.69%	11.87%	14.60%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jefferson County Library District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$189,325	$357,162
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(12,766)	(13,260)
Allocated pooled OPSRP UAL	13,033	3,823
Side account	0	0
Net unfunded pension actuarial accrued liability	189,592	347,725
Combined valuation payroll	184,911	224,045
Net pension UAL as a percentage of payroll	103%	155%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(0.61%)	(0.51%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,880	$5,804
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$10,561	$1,669	5.78%	$9,869	$570
Tier 2 General Service	10.58%	98,507	10,422	10.42%	136,151	14,187
Total General Service		**109,068**	**12,091**		**146,020**	**14,757**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$109,068**	**$12,091**		**$146,020**	**$14,757**
Employer normal cost rate						
General Service			**11.09%**			**10.11%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.09%**			**10.11%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($13,260)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.77%)
B. Actual employer payroll	88,067
C. Payment to transition liability/(surplus)	(678)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.77%)
B. Actual employer payroll	98,972
C. Payment to transition liability/(surplus)	(762)
4. Supplemental payment to transition liability	0
5. Interest	(946)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($12,766)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(12,766)	(13,260)
2. Combined valuation payroll	184,911	224,045
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.61%)**	**(0.51%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	184,911	224,045
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Jefferson County EMS/2712
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Jefferson County EMS/2712

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Jefferson County EMS/2712

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jefferson County EMS -- #2712

December 2013

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Executive Summary

Milliman has prepared this report for Jefferson County EMS to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jefferson County EMS.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Jefferson County EMS

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.66%	12.66%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.50%	0.50%	0.50%	0.50%	0.50%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.24%**	**16.24%**	**20.30%**	**10.94%**	**15.04%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.80%**	**16.80%**	**20.86%**	**11.42%**	**15.52%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.47%	13.47%	20.32%	11.09%	13.80%
July 1, 2013 to June 30, 2015	13.69%	13.69%	19.89%	11.07%	13.80%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jefferson County EMS

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$324,373	$557,035
Allocated pre-SLGRP pooled liability/(surplus)	(62,775)	(71,301)
Transition liability/(surplus)	17,974	18,237
Allocated pooled OPSRP UAL	22,330	5,962
Side account	0	0
Net unfunded pension actuarial accrued liability	301,902	509,933
Combined valuation payroll	316,811	349,424
Net pension UAL as a percentage of payroll	95%	146%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.50%	0.45%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,647	$9,052
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$80,908	$12,783	5.78%	$78,640	$4,545
Tier 2 General Service	10.58%	122,372	12,947	10.42%	160,089	16,681
Total General Service		**203,280**	**25,730**		**238,729**	**21,226**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$203,280**	**$25,730**		**$238,729**	**$21,226**
Employer normal cost rate						
General Service			**12.66%**			**8.89%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.66%**			**8.89%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$18,237
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.48%
B. Actual employer payroll	174,063
C. Payment to transition liability/(surplus)	836
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.48%
B. Actual employer payroll	158,139
C. Payment to transition liability/(surplus)	758
4. Supplemental payment to transition liability	0
5. Interest	1,331
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$17,974**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	17,974	18,237
2. Combined valuation payroll	316,811	349,424
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.50%**	**0.45%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	316,811	349,424
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Portland, OR 97204-3654
503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Jackson County/2005
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Jackson County/2005

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Jackson County/2005

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jackson County -- #2005

December 2013

Secondary Employers

2133 City Of Medford Library

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Jackson County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jackson County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Jackson County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.12%	13.15%	16.62%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(1.42%)	(1.42%)	(1.42%)	(1.42%)	(1.42%)
Net pension contribution rate	**15.78%**	**14.81%**	**18.28%**	**9.02%**	**13.12%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.34%**	**15.37%**	**18.84%**	**9.50%**	**13.60%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.59%	10.74%	18.41%	9.26%	11.97%
July 1, 2013 to June 30, 2015	13.00%	11.02%	18.11%	9.29%	12.02%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jackson County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$48,080,236	$73,891,882
Allocated pre-SLGRP pooled liability/(surplus)	(9,304,825)	(9,458,271)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	3,309,825	790,873
Side account	7,510,865	7,159,880
Net unfunded pension actuarial accrued liability	34,574,371	58,064,604
Combined valuation payroll	46,959,364	46,351,851
Net pension UAL as a percentage of payroll	74%	125%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	(1.42%)	(1.33%)
Allocated pooled RHIA UAL	$985,227	$1,200,768
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$9,878,157	$1,560,749	5.78%	$10,945,681	$632,660
Tier 2 General Service	10.58%	10,155,580	1,074,460	10.42%	10,005,455	1,042,568
Total General Service		**20,033,737**	**2,635,209**		**20,951,136**	**1,675,228**
Tier 1 Police & Fire	17.89%	3,237,199	579,135	15.06%	3,544,896	533,861
Tier 2 Police & Fire	15.70%	4,487,578	704,550	15.12%	4,583,200	692,980
Total Police & Fire		**7,724,777**	**1,283,685**		**8,128,096**	**1,226,841**
Total		**$27,758,514**	**$3,918,894**		**$29,079,232**	**$2,902,069**
Employer normal cost rate						
General Service			**13.15%**			**8.00%**
Police & Fire			**16.62%**			**15.09%**
Aggregate (Default)			**14.12%**			**9.98%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	46,959,364	46,351,851
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$7,159,880**	**$7,159,880**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(653,432)	(653,432)
5. Side account earnings during 2012		1,005,417	1,005,417
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$7,510,865**	**$7,510,865**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$7,510,865	$7,159,880
Side Account 2	0	0
Side Account 3	0	0
Total	**$7,510,865**	**$7,159,880**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$7,510,865	$7,159,880
2. Combined valuation payroll	46,959,364	46,351,851
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(1.42%)	(1.33%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Jackson County Vector Control District/2541
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Jackson County Vector Control District/2541

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Jackson County Vector Control District/2541

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

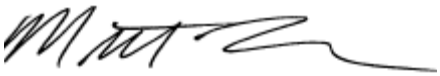
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

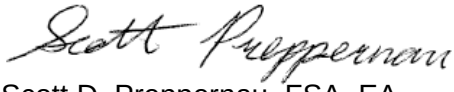
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jackson County Vector Control District -- #2541

December 2013

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Executive Summary

Milliman has prepared this report for Jackson County Vector Control District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jackson County Vector Control District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Jackson County Vector Control District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.69%)	(4.69%)	(4.69%)	(4.69%)	(4.69%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.95%**	**15.95%**	**16.87%**	**7.51%**	**11.61%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.51%**	**16.51%**	**17.43%**	**7.99%**	**12.09%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.52%	8.52%	18.08%	8.85%	11.56%
July 1, 2013 to June 30, 2015	9.23%	9.23%	18.54%	9.72%	12.45%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jackson County Vector Control District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$128,433	$352,164
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(66,352)	(72,358)
Allocated pooled OPSRP UAL	8,841	3,769
Side account	0	0
Net unfunded pension actuarial accrued liability	70,922	283,575
Combined valuation payroll	125,439	220,910
Net pension UAL as a percentage of payroll	57%	128%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.69%)	(2.82%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,632	$5,723
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$125,439	$19,819	5.78%	$220,910	$12,769
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**125,439**	**19,819**		**220,910**	**12,769**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$125,439**	**$19,819**		**$220,910**	**$12,769**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($72,358)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.46%)
B. Actual employer payroll	161,282
C. Payment to transition liability/(surplus)	(5,580)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.46%)
B. Actual employer payroll	154,354
C. Payment to transition liability/(surplus)	(5,341)
4. Supplemental payment to transition liability	0
5. Interest	(4,915)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($66,352)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(66,352)	(72,358)
2. Combined valuation payroll	125,439	220,910
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.69%)**	**(2.82%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	125,439	220,910
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Jackson County Fire District #4/2620
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Jackson County Fire District #4/2620

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Jackson County Fire District #4/2620

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jackson County Fire District #4 -- #2620

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Jackson County Fire District #4 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jackson County Fire District #4.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Jackson County Fire District #4

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**22.73%**	**18.18%**	**22.73%**	**12.20%**	**16.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**23.29%**	**18.74%**	**23.29%**	**12.68%**	**16.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	21.55%	13.35%	21.55%	11.90%	14.61%
July 1, 2013 to June 30, 2015	22.03%	14.89%	22.03%	13.24%	15.97%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jackson County Fire District #4

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$318,058	$413,942
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	21,895	4,430
Side account	0	0
Net unfunded pension actuarial accrued liability	339,953	418,372
Combined valuation payroll	310,643	259,663
Net pension UAL as a percentage of payroll	109%	161%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.00%	0.00%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,517	$6,727
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	230,411	41,221	15.06%	175,447	26,422
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**230,411**	**41,221**		**175,447**	**26,422**
Total		**$230,411**	**$41,221**		**$175,447**	**$26,422**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	310,643	259,663
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	310,643	259,663
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Jackson County Fire District #3/2715
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Jackson County Fire District #3/2715

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Jackson County Fire District #3/2715

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Jackson County Fire District #3 -- #2715

December 2013

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Executive Summary

Milliman has prepared this report for Jackson County Fire District #3 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Jackson County Fire District #3.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Jackson County Fire District #3

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.36%	10.58%	16.56%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(6.55%)	(6.55%)	(6.55%)	(6.55%)	(6.55%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.89%**	**7.11%**	**13.09%**	**3.89%**	**7.99%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.45%**	**7.67%**	**13.65%**	**4.37%**	**8.47%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.78%	7.66%	13.12%	3.90%	6.61%
July 1, 2013 to June 30, 2015	12.56%	8.16%	12.84%	4.01%	6.74%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Jackson County Fire District #3

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,602,959	$8,160,152
Allocated pre-SLGRP pooled liability/(surplus)	(1,084,324)	(1,044,512)
Transition liability/(surplus)	(4,042,363)	(4,129,384)
Allocated pooled OPSRP UAL	385,706	87,339
Side account	0	0
Net unfunded pension actuarial accrued liability	861,978	3,073,595
Combined valuation payroll	5,472,340	5,118,805
Net pension UAL as a percentage of payroll	16%	60%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(6.55%)	(6.94%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$114,812	$132,605
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	123,396	13,055	10.42%	219,410	22,863
Total General Service		**123,396**	**13,055**		**219,410**	**22,863**
Tier 1 Police & Fire	17.89%	1,408,219	251,930	15.06%	1,422,893	214,288
Tier 2 Police & Fire	15.70%	2,165,973	340,058	15.12%	2,039,487	308,370
Total Police & Fire		**3,574,192**	**591,988**		**3,462,380**	**522,658**
Total		**$3,697,588**	**$605,043**		**$3,681,790**	**$545,521**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.56%**			**15.10%**
Aggregate (Default)			**16.36%**			**14.82%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($4,129,384)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.71%)
B. Actual employer payroll	2,781,425
C. Payment to transition liability/(surplus)	(186,634)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.71%)
B. Actual employer payroll	2,977,965
C. Payment to transition liability/(surplus)	(199,821)
4. Supplemental payment to transition liability	0
5. Interest	(299,434)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($4,042,363)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(4,042,363)	(4,129,384)
2. Combined valuation payroll	5,472,340	5,118,805
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.55%)**	**(6.94%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	5,472,340	5,118,805
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Imbler Rural Fire Protection District/2651
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Imbler Rural Fire Protection District/2651

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Imbler Rural Fire Protection District/2651

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Imbler Rural Fire Protection District -- #2651

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Imbler Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Imbler Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Imbler Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.05%	1.05%	1.05%	1.05%	1.05%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**22.02%**	**17.47%**	**22.02%**	**11.49%**	**15.59%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**22.58%**	**18.03%**	**22.58%**	**11.97%**	**16.07%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	21.30%	19.99%	27.77%	18.54%	21.25%
July 1, 2013 to June 30, 2015	21.73%	14.61%	21.73%	12.96%	15.69%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Imbler Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$28,066	$29,678
Allocated pre-SLGRP pooled liability/(surplus)	(5,432)	(3,799)
Transition liability/(surplus)	3,235	5,061
Allocated pooled OPSRP UAL	1,932	318
Side account	0	0
Net unfunded pension actuarial accrued liability	27,801	31,258
Combined valuation payroll	27,412	18,617
Net pension UAL as a percentage of payroll	101%	168%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.05%	2.34%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$575	$482
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	10,612	1,898	15.06%	1,769	266
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**10,612**	**1,898**		**1,769**	**266**
Total		**$10,612**	**$1,898**		**$1,769**	**$266**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.04%**
Aggregate (Default)			**17.89%**			**15.04%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$5,061
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	7.93%
B. Actual employer payroll	13,026
C. Payment to transition liability/(surplus)	1,033
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	7.93%
B. Actual employer payroll	13,026
C. Payment to transition liability/(surplus)	1,033
4. Supplemental payment to transition liability	0
5. Interest	240
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$3,235**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	3,235	5,061
2. Combined valuation payroll	27,412	18,617
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.05%**	**2.34%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	27,412	18,617
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Illinois Valley Fire District/2564
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Illinois Valley Fire District/2564

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Illinois Valley Fire District/2564

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

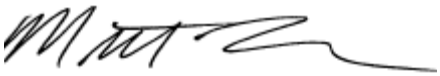
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

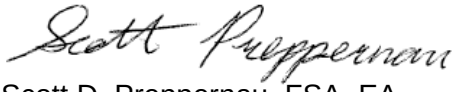
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Illinois Valley Fire District -- #2564

December 2013

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Executive Summary

Milliman has prepared this report for Illinois Valley Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Illinois Valley Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Illinois Valley Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(15.17%)	(15.17%)	(15.17%)	(15.17%)	(15.17%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**5.37%**	**3.01%**	**5.37%**	**0.00%**	**1.13%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**5.93%**	**3.57%**	**5.93%**	**0.48%**	**1.61%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	N/A	N/A	N/A	N/A	N/A
July 1, 2013 to June 30, 2015	6.00%	0.00%	6.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Illinois Valley Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$269,091	$421,813
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(492,162)	(508,665)
Allocated pooled OPSRP UAL	18,524	4,515
Side account	0	0
Net unfunded pension actuarial accrued liability	(204,547)	(82,337)
Combined valuation payroll	262,818	264,592
Net pension UAL as a percentage of payroll	(78%)	(31%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(15.17%)	(15.23%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,514	$6,854
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	69,540	10,918	15.12%	62,671	9,476
Total Police & Fire		**69,540**	**10,918**		**62,671**	**9,476**
Total		**$69,540**	**$10,918**		**$62,671**	**$9,476**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($508,665)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(15.23%)
B. Actual employer payroll	165,619
C. Payment to transition liability/(surplus)	(25,224)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(15.23%)
B. Actual employer payroll	182,110
C. Payment to transition liability/(surplus)	(27,735)
4. Supplemental payment to transition liability	0
5. Interest	(36,456)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($492,162)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(492,162)	(508,665)
2. Combined valuation payroll	262,818	264,592
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(15.17%)**	**(15.23%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	262,818	264,592
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Hubbard Rural Fire Protection District/2829
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Hubbard Rural Fire Protection District/2829

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Hubbard Rural Fire Protection District/2829

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Hubbard Rural Fire Protection District -- #2829

December 2013

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Executive Summary

Milliman has prepared this report for Hubbard Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Hubbard Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Hubbard Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(10.56%)	(10.56%)	(10.56%)	(10.56%)	(10.56%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**8.21%**	**7.62%**	**11.00%**	**1.64%**	**5.74%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**8.77%**	**8.18%**	**11.56%**	**2.12%**	**6.22%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.11%	0.00%	6.58%	0.00%	0.06%
July 1, 2013 to June 30, 2015	2.14%	0.91%	8.08%	0.00%	1.99%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Hubbard Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$61,605	$78,243
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(71,633)	(74,848)
Allocated pooled OPSRP UAL	4,241	837
Side account	0	0
Net unfunded pension actuarial accrued liability	(5,787)	4,232
Combined valuation payroll	60,169	49,081
Net pension UAL as a percentage of payroll	(10%)	9%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(10.56%)	(13.12%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,262	$1,271
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($74,848)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(14.96%)
B. Actual employer payroll	28,494
C. Payment to transition liability/(surplus)	(4,263)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(14.96%)
B. Actual employer payroll	28,463
C. Payment to transition liability/(surplus)	(4,258)
4. Supplemental payment to transition liability	0
5. Interest	(5,306)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($71,633)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(71,633)	(74,848)
2. Combined valuation payroll	60,169	49,081
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(10.56%)**	**(13.12%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	60,169	49,081
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Housing Authority of Jackson County/2773
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Housing Authority of Jackson County/2773

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Housing Authority of Jackson County/2773

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

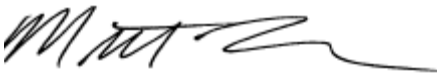
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

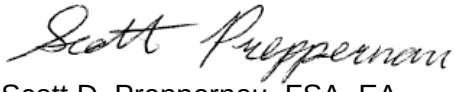
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Housing Authority of Jackson County -- #2773

December 2013

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Executive Summary

Milliman has prepared this report for Housing Authority of Jackson County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Housing Authority of Jackson County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Housing Authority of Jackson County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.85%	11.85%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.79%	1.79%	1.79%	1.79%	1.79%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.72%**	**16.72%**	**21.59%**	**12.23%**	**16.33%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.28%**	**17.28%**	**22.15%**	**12.71%**	**16.81%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.10%	15.10%	21.85%	12.62%	15.33%
July 1, 2013 to June 30, 2015	15.28%	15.28%	21.27%	12.45%	15.18%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Housing Authority of Jackson County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,404,443	$3,675,457
Allocated pre-SLGRP pooled liability/(surplus)	(465,325)	(470,464)
Transition liability/(surplus)	472,535	490,133
Allocated pooled OPSRP UAL	165,521	39,339
Side account	0	0
Net unfunded pension actuarial accrued liability	2,577,174	3,734,465
Combined valuation payroll	2,348,389	2,305,588
Net pension UAL as a percentage of payroll	110%	162%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.79%	1.83%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$49,270	$59,727
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$316,091	$49,942	5.78%	$404,661	$23,389
Tier 2 General Service	10.58%	984,017	104,109	10.42%	1,020,044	106,289
Total General Service		**1,300,108**	**154,051**		**1,424,705**	**129,678**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$1,300,108**	**$154,051**		**$1,424,705**	**$129,678**
Employer normal cost rate						
General Service			**11.85%**			**9.10%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.85%**			**9.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$490,133
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.01%
B. Actual employer payroll	1,317,581
C. Payment to transition liability/(surplus)	26,483
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.01%
B. Actual employer payroll	1,299,380
C. Payment to transition liability/(surplus)	26,118
4. Supplemental payment to transition liability	0
5. Interest	35,003
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$472,535**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	472,535	490,133
2. Combined valuation payroll	2,348,389	2,305,588
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.79%**	**1.83%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,348,389	2,305,588
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Horsefly Irrigation District/2510
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Horsefly Irrigation District/2510

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Horsefly Irrigation District/2510

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

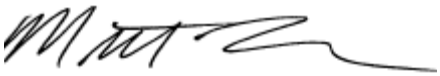
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

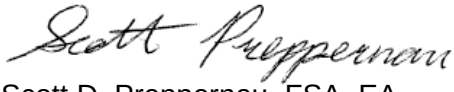
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Horsefly Irrigation District -- #2510

December 2013

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Executive Summary

Milliman has prepared this report for Horsefly Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Horsefly Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Horsefly Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	9.15%	9.15%	9.15%	9.15%	9.15%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**27.92%**	**27.33%**	**30.71%**	**21.35%**	**25.45%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**28.48%**	**27.89%**	**31.27%**	**21.83%**	**25.93%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	20.29%	18.98%	26.76%	17.53%	20.24%
July 1, 2013 to June 30, 2015	24.17%	22.94%	30.11%	21.29%	24.02%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Horsefly Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$47,751	$74,608
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	48,114	48,473
Allocated pooled OPSRP UAL	3,287	799
Side account	0	0
Net unfunded pension actuarial accrued liability	99,152	123,880
Combined valuation payroll	46,638	46,801
Net pension UAL as a percentage of payroll	213%	265%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	9.15%	8.91%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$978	$1,212
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$48,473
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	5.22%
B. Actual employer payroll	37,575
C. Payment to transition liability/(surplus)	1,961
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	5.22%
B. Actual employer payroll	37,575
C. Payment to transition liability/(surplus)	1,962
4. Supplemental payment to transition liability	0
5. Interest	3,564
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$48,114**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	48,114	48,473
2. Combined valuation payroll	46,638	46,801
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**9.15%**	**8.91%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	46,638	46,801
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Hoodland Fire District #74/2607
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Hoodland Fire District #74/2607

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Hoodland Fire District #74/2607

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Hoodland Fire District #74 -- #2607

December 2013

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Executive Summary

Milliman has prepared this report for Hoodland Fire District #74 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Hoodland Fire District #74.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Hoodland Fire District #74

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.49%	10.58%	16.99%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.81%)	(1.81%)	(1.81%)	(1.81%)	(1.81%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.76%**	**11.85%**	**18.26%**	**8.63%**	**12.73%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.32%**	**12.41%**	**18.82%**	**9.11%**	**13.21%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.83%	11.95%	17.39%	8.19%	10.90%
July 1, 2013 to June 30, 2015	17.00%	12.79%	17.46%	8.64%	11.37%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Hoodland Fire District #74

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$900,969	$1,129,407
Allocated pre-SLGRP pooled liability/(surplus)	(174,362)	(144,566)
Transition liability/(surplus)	(179,253)	(186,395)
Allocated pooled OPSRP UAL	62,022	12,088
Side account	0	0
Net unfunded pension actuarial accrued liability	609,376	810,534
Combined valuation payroll	879,965	708,469
Net pension UAL as a percentage of payroll	69%	114%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.81%)	(2.26%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$18,462	$18,353
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	53,177	5,626	10.42%	51,935	5,412
Total General Service		**53,177**	**5,626**		**51,935**	**5,412**
Tier 1 Police & Fire	17.89%	370,391	66,263	15.06%	224,885	33,868
Tier 2 Police & Fire	15.70%	257,325	40,400	15.12%	253,707	38,360
Total Police & Fire		**627,716**	**106,663**		**478,592**	**72,228**
Total		**$680,893**	**$112,289**		**$530,527**	**$77,640**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.99%**			**15.09%**
Aggregate (Default)			**16.49%**			**14.63%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($186,395)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.42%)
B. Actual employer payroll	407,718
C. Payment to transition liability/(surplus)	(9,867)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.42%)
B. Actual employer payroll	436,105
C. Payment to transition liability/(surplus)	(10,553)
4. Supplemental payment to transition liability	0
5. Interest	(13,278)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($179,253)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(179,253)	(186,395)
2. Combined valuation payroll	879,965	708,469
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.81%)**	**(2.26%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	879,965	708,469
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Hood River County/2035
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Hood River County/2035

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
Hood River County/2035

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Hood River County -- #2035

December 2013

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Executive Summary

Milliman has prepared this report for Hood River County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Hood River County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Hood River County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.27%	12.70%	16.73%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.11%)	(4.11%)	(4.11%)	(4.11%)	(4.11%)
Side account rate relief [2]	(6.82%)	(6.82%)	(6.82%)	(6.82%)	(6.82%)
Net pension contribution rate	**7.18%**	**6.61%**	**10.64%**	**1.27%**	**5.37%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**7.74%**	**7.17%**	**11.20%**	**1.75%**	**5.85%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.31%	5.95%	13.43%	4.04%	6.75%
July 1, 2013 to June 30, 2015	5.64%	4.44%	11.21%	2.40%	5.13%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Hood River County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$6,667,485	$10,511,962
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,019,596)	(3,008,172)
Allocated pooled OPSRP UAL	458,987	112,511
Side account	5,002,793	4,670,301
Net unfunded pension actuarial accrued liability	(895,917)	2,946,000
Combined valuation payroll	6,512,049	6,594,079
Net pension UAL as a percentage of payroll	(14%)	45%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.11%)	(3.92%)
Side account rate relief	(6.82%)	(6.09%)
Allocated pooled RHIA UAL	$136,626	$170,823
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,663,381	$262,814	5.78%	$1,911,804	$110,502
Tier 2 General Service	10.58%	2,440,421	258,197	10.42%	2,295,712	239,213
Total General Service		**4,103,802**	**521,011**		**4,207,516**	**349,715**
Tier 1 Police & Fire	17.89%	323,568	57,886	15.06%	554,993	83,582
Tier 2 Police & Fire	15.70%	363,902	57,133	15.12%	349,034	52,774
Total Police & Fire		**687,470**	**115,019**		**904,027**	**136,356**
Total		**$4,791,272**	**$636,030**		**$5,111,543**	**$486,071**
Employer normal cost rate						
General Service			**12.70%**			**8.31%**
Police & Fire			**16.73%**			**15.08%**
Aggregate (Default)			**13.27%**			**9.51%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,008,172)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.17%)
B. Actual employer payroll	3,325,761
C. Payment to transition liability/(surplus)	(105,427)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.17%)
B. Actual employer payroll	3,369,807
C. Payment to transition liability/(surplus)	(106,823)
4. Supplemental payment to transition liability	0
5. Interest	(223,674)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($3,019,596)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,019,596)	(3,008,172)
2. Combined valuation payroll	6,512,049	6,594,079
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.11%)**	**(3.92%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$4,670,301**	**$4,670,301**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(329,779)	(329,779)
5. Side account earnings during 2012		663,271	663,271
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$5,002,793**	**$5,002,793**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$5,002,793	$4,670,301
Side Account 2	0	0
Side Account 3	0	0
Total	**$5,002,793**	**$4,670,301**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$5,002,793	$4,670,301
2. Combined valuation payroll	6,512,049	6,594,079
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(6.82%)	(6.09%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

High Desert Parks & Recreation District/2838
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
High Desert Parks & Recreation District/2838

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
High Desert Parks & Recreation District/2838

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

High Desert Parks & Recreation District -- #2838

December 2013

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Executive Summary

Milliman has prepared this report for High Desert Parks & Recreation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to High Desert Parks & Recreation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for High Desert Parks & Recreation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.39%	0.39%	0.39%	0.39%	0.39%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.05%**	**14.05%**	**20.19%**	**10.83%**	**14.93%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.61%**	**14.61%**	**20.75%**	**11.31%**	**15.41%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.75%	14.75%	20.22%	10.99%	13.70%
July 1, 2013 to June 30, 2015	15.16%	15.16%	19.83%	11.01%	13.74%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

High Desert Parks & Recreation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$24,993	$37,840
Allocated pre-SLGRP pooled liability/(surplus)	(4,837)	(4,844)
Transition liability/(surplus)	1,062	1,071
Allocated pooled OPSRP UAL	1,720	405
Side account	0	0
Net unfunded pension actuarial accrued liability	22,938	34,472
Combined valuation payroll	24,410	23,737
Net pension UAL as a percentage of payroll	94%	145%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.39%	0.39%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$512	$615
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	24,410	2,583	10.42%	23,737	2,473
Total General Service		**24,410**	**2,583**		**23,737**	**2,473**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$24,410**	**$2,583**		**$23,737**	**$2,473**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$1,071
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.38%
B. Actual employer payroll	11,463
C. Payment to transition liability/(surplus)	44
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.38%
B. Actual employer payroll	11,807
C. Payment to transition liability/(surplus)	44
4. Supplemental payment to transition liability	0
5. Interest	79
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$1,062**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	1,062	1,071
2. Combined valuation payroll	24,410	23,737
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.39%**	**0.39%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	24,410	23,737
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Harrisburg Fire/Rescue/2819
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Harrisburg Fire/Rescue/2819

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Harrisburg Fire/Rescue/2819

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Harrisburg Fire & Rescue -- #2819

December 2013

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Executive Summary

Milliman has prepared this report for Harrisburg Fire/Rescue to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Harrisburg Fire/Rescue.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Harrisburg Fire/Rescue

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.69%	13.34%	15.69%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.70%)	(0.70%)	(0.70%)	(0.70%)	(0.70%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.07%**	**15.72%**	**18.07%**	**9.74%**	**13.84%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.63%**	**16.28%**	**18.63%**	**10.22%**	**14.32%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.55%	11.19%	18.55%	9.74%	12.45%
July 1, 2013 to June 30, 2015	18.91%	11.77%	18.91%	10.12%	12.85%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Harrisburg Fire/Rescue

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$137,961	$287,846
Allocated pre-SLGRP pooled liability/(surplus)	(26,699)	(36,845)
Transition liability/(surplus)	(10,694)	(10,988)
Allocated pooled OPSRP UAL	9,497	3,081
Side account	0	0
Net unfunded pension actuarial accrued liability	110,065	243,094
Combined valuation payroll	134,745	180,564
Net pension UAL as a percentage of payroll	82%	135%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.70%)	(0.52%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,827	$4,678
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	114,469	17,239
Tier 2 Police & Fire	15.70%	7,009	1,100	15.12%	4,269	645
Total Police & Fire		**7,009**	**1,100**		**118,738**	**17,884**
Total		**$7,009**	**$1,100**		**$118,738**	**$17,884**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.69%**			**15.06%**
Aggregate (Default)			**15.69%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($10,988)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.87%)
B. Actual employer payroll	61,302
C. Payment to transition liability/(surplus)	(533)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.87%)
B. Actual employer payroll	63,524
C. Payment to transition liability/(surplus)	(553)
4. Supplemental payment to transition liability	0
5. Interest	(792)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($10,694)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(10,694)	(10,988)
2. Combined valuation payroll	134,745	180,564
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.70%)**	**(0.52%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	134,745	180,564
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Harney Hospital/2855
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Harney Hospital/2855

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Harney Hospital/2855

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Harney Hospital -- #2855

December 2013

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Executive Summary

Milliman has prepared this report for Harney Hospital to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Harney Hospital.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Harney Hospital

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.53%	12.53%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.62%)	(5.62%)	(5.62%)	(5.62%)	(5.62%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.75%**	**11.75%**	**15.94%**	**6.58%**	**10.68%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.31%**	**12.31%**	**16.50%**	**7.06%**	**11.16%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.40%	7.40%	14.05%	4.82%	7.53%
July 1, 2013 to June 30, 2015	7.84%	7.84%	14.06%	5.24%	7.97%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Harney Hospital

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$6,805,998	$8,439,605
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(4,207,258)	(4,394,439)
Allocated pooled OPSRP UAL	468,522	90,330
Side account	0	0
Net unfunded pension actuarial accrued liability	3,067,262	4,135,496
Combined valuation payroll	6,647,333	5,294,104
Net pension UAL as a percentage of payroll	46%	78%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.62%)	(7.14%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$139,464	$137,146
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$873,317	$137,984	5.78%	$776,750	$44,896
Tier 2 General Service	10.58%	1,459,211	154,385	10.42%	1,543,758	160,860
Total General Service		**2,332,528**	**292,369**		**2,320,508**	**205,756**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$2,332,528**	**$292,369**		**$2,320,508**	**$205,756**
Employer normal cost rate						
General Service			**12.53%**			**8.87%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.53%**			**8.87%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($4,394,439)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.49%)
B. Actual employer payroll	2,941,891
C. Payment to transition liability/(surplus)	(220,348)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.49%)
B. Actual employer payroll	3,718,063
C. Payment to transition liability/(surplus)	(278,482)
4. Supplemental payment to transition liability	0
5. Interest	(311,649)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($4,207,258)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(4,207,258)	(4,394,439)
2. Combined valuation payroll	6,647,333	5,294,104
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.62%)**	**(7.14%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	6,647,333	5,294,104
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Harney County/2004
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Harney County/2004

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Harney County/2004

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Harney County -- #2004

December 2013

Secondary Employers

2041 Harney District Hospital

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Executive Summary

Milliman has prepared this report for Harney County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Harney County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Harney County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.21%	16.30%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.32%)	(2.32%)	(2.32%)	(2.32%)	(2.32%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.69%**	**13.97%**	**17.06%**	**8.12%**	**12.22%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.25%**	**14.53%**	**17.62%**	**8.60%**	**12.70%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.95%	9.96%	17.66%	8.67%	11.38%
July 1, 2013 to June 30, 2015	11.22%	9.59%	16.90%	8.07%	10.80%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Harney County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,689,876	$5,091,448
Allocated pre-SLGRP pooled liability/(surplus)	(714,091)	(651,713)
Transition liability/(surplus)	(943,070)	(945,941)
Allocated pooled OPSRP UAL	254,010	54,494
Side account	0	0
Net unfunded pension actuarial accrued liability	2,286,725	3,548,288
Combined valuation payroll	3,603,856	3,193,829
Net pension UAL as a percentage of payroll	63%	111%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.32%)	(2.55%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$75,610	$82,738
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$685,261	$108,271	5.78%	$776,395	$44,876
Tier 2 General Service	10.58%	674,425	71,354	10.42%	593,755	61,869
Total General Service		**1,359,686**	**179,625**		**1,370,150**	**106,745**
Tier 1 Police & Fire	17.89%	113,811	20,361	15.06%	109,776	16,532
Tier 2 Police & Fire	15.70%	302,110	47,431	15.12%	284,048	42,948
Total Police & Fire		**415,921**	**67,792**		**393,824**	**59,480**
Total		**$1,775,607**	**$247,417**		**$1,763,974**	**$166,225**
Employer normal cost rate						
General Service			**13.21%**			**7.79%**
Police & Fire			**16.30%**			**15.10%**
Aggregate (Default)			**13.93%**			**9.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($945,941)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.94%)
B. Actual employer payroll	1,792,652
C. Payment to transition liability/(surplus)	(34,777)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.94%)
B. Actual employer payroll	1,956,207
C. Payment to transition liability/(surplus)	(37,951)
4. Supplemental payment to transition liability	0
5. Interest	(69,857)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($943,070)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(943,070)	(945,941)
2. Combined valuation payroll	3,603,856	3,193,829
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.32%)**	**(2.55%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,603,856	3,193,829
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Green Sanitary/2765
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Green Sanitary/2765

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Green Sanitary/2765

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Green Sanitary -- #2765

December 2013

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Executive Summary

Milliman has prepared this report for Green Sanitary to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Green Sanitary.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Green Sanitary

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.22%	13.22%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.56%)	(1.56%)	(1.56%)	(1.56%)	(1.56%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.74%**	**14.74%**	**18.24%**	**8.88%**	**12.98%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.30%**	**15.30%**	**18.80%**	**9.36%**	**13.46%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.57%	10.57%	18.12%	8.89%	11.60%
July 1, 2013 to June 30, 2015	10.79%	10.79%	17.84%	9.02%	11.75%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Green Sanitary

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$259,147	$388,270
Allocated pre-SLGRP pooled liability/(surplus)	(50,152)	(49,699)
Transition liability/(surplus)	(44,421)	(45,306)
Allocated pooled OPSRP UAL	17,840	4,156
Side account	0	0
Net unfunded pension actuarial accrued liability	182,414	297,421
Combined valuation payroll	253,106	243,559
Net pension UAL as a percentage of payroll	72%	122%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.56%)	(1.60%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,310	$6,310
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$128,097	$20,239	5.78%	$125,123	$7,232
Tier 2 General Service	10.58%	125,009	13,226	10.42%	118,436	12,341
Total General Service		**253,106**	**33,465**		**243,559**	**19,573**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$253,106**	**$33,465**		**$243,559**	**$19,573**
Employer normal cost rate						
General Service			**13.22%**			**8.04%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.22%**			**8.04%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($45,306)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.72%)
B. Actual employer payroll	116,294
C. Payment to transition liability/(surplus)	(2,000)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.72%)
B. Actual employer payroll	126,459
C. Payment to transition liability/(surplus)	(2,175)
4. Supplemental payment to transition liability	0
5. Interest	(3,290)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($44,421)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(44,421)	(45,306)
2. Combined valuation payroll	253,106	243,559
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.56%)**	**(1.60%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	253,106	243,559
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Grants Pass Irrigation District/2511
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Grants Pass Irrigation District/2511

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Grants Pass Irrigation District/2511

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Grants Pass Irrigation District -- #2511

December 2013

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Executive Summary

Milliman has prepared this report for Grants Pass Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Grants Pass Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Grants Pass Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.99%	0.99%	0.99%	0.99%	0.99%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.87%**	**19.87%**	**20.79%**	**11.43%**	**15.53%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.43%**	**20.43%**	**21.35%**	**11.91%**	**16.01%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.19%	11.19%	20.75%	11.52%	14.23%
July 1, 2013 to June 30, 2015	11.18%	11.18%	20.49%	11.67%	14.40%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Grants Pass Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$445,070	$766,086
Allocated pre-SLGRP pooled liability/(surplus)	(86,133)	(98,060)
Transition liability/(surplus)	48,505	49,587
Allocated pooled OPSRP UAL	30,638	8,199
Side account	0	0
Net unfunded pension actuarial accrued liability	438,080	725,812
Combined valuation payroll	434,694	480,560
Net pension UAL as a percentage of payroll	101%	151%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.99%	0.89%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,120	$12,449
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$302,797	$47,842	5.78%	$325,308	$18,803
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**302,797**	**47,842**		**325,308**	**18,803**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$302,797**	**$47,842**		**$325,308**	**$18,803**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$49,587
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.91%
B. Actual employer payroll	247,354
C. Payment to transition liability/(surplus)	2,251
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.91%
B. Actual employer payroll	266,343
C. Payment to transition liability/(surplus)	2,424
4. Supplemental payment to transition liability	0
5. Interest	3,593
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$48,505**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	48,505	49,587
2. Combined valuation payroll	434,694	480,560
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.99%**	**0.89%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	434,694	480,560
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Grant County/2012
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Grant County/2012

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Grant County/2012

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Grant County -- #2012

December 2013

Secondary Employers

2735 Grant County Extension and 4-H Service District

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Grant County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Grant County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Grant County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.26%	13.44%	16.35%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(15.21%)	(15.21%)	(15.21%)	(15.21%)	(15.21%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**2.13%**	**1.31%**	**4.22%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**2.69%**	**1.87%**	**4.78%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	5.57%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	4.46%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Grant County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,200,498	$4,923,377
Allocated pre-SLGRP pooled liability/(surplus)	(619,383)	(630,200)
Transition liability/(surplus)	(5,359,235)	(5,382,105)
Allocated pooled OPSRP UAL	220,321	52,695
Side account	0	0
Net unfunded pension actuarial accrued liability	(2,557,799)	(1,036,233)
Combined valuation payroll	3,125,886	3,088,399
Net pension UAL as a percentage of payroll	(82%)	(34%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(15.21%)	(14.99%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$65,582	$80,007
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$590,396	$93,283	5.78%	$674,686	$38,997
Tier 2 General Service	10.58%	486,292	51,450	10.42%	489,467	51,002
Total General Service		**1,076,688**	**144,733**		**1,164,153**	**89,999**
Tier 1 Police & Fire	17.89%	125,311	22,418	15.06%	121,137	18,243
Tier 2 Police & Fire	15.70%	297,334	46,681	15.12%	212,455	32,123
Total Police & Fire		**422,645**	**69,099**		**333,592**	**50,366**
Total		**$1,499,333**	**$213,832**		**$1,497,745**	**$140,365**
Employer normal cost rate						
General Service			**13.44%**			**7.73%**
Police & Fire			**16.35%**			**15.10%**
Aggregate (Default)			**14.26%**			**9.37%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($5,382,105)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(13.38%)
B. Actual employer payroll	1,691,723
C. Payment to transition liability/(surplus)	(208,203)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(13.38%)
B. Actual employer payroll	1,724,886
C. Payment to transition liability/(surplus)	(211,647)
4. Supplemental payment to transition liability	0
5. Interest	(396,980)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($5,359,235)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(5,359,235)	(5,382,105)
2. Combined valuation payroll	3,125,886	3,088,399
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(15.21%)**	**(14.99%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,125,886	3,088,399
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Goshen Fire District/2573
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Goshen Fire District/2573

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Goshen Fire District/2573

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Goshen Fire District -- #2573

December 2013

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Executive Summary

Milliman has prepared this report for Goshen Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Goshen Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Goshen Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	10.35%	10.35%	10.35%	10.35%	10.35%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**33.08%**	**28.53%**	**33.08%**	**22.55%**	**26.65%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**33.64%**	**29.09%**	**33.64%**	**23.03%**	**27.13%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	31.03%	22.83%	31.03%	21.38%	24.09%
July 1, 2013 to June 30, 2015	31.51%	24.37%	31.51%	22.72%	25.45%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Goshen Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$160,083	$252,960
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	182,335	174,848
Allocated pooled OPSRP UAL	11,020	2,707
Side account	0	0
Net unfunded pension actuarial accrued liability	353,438	430,515
Combined valuation payroll	156,351	158,680
Net pension UAL as a percentage of payroll	226%	271%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	10.35%	9.48%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,280	$4,111
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	85,809	15,351	15.06%	83,941	12,642
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**85,809**	**15,351**		**83,941**	**12,642**
Total		**$85,809**	**$15,351**		**$83,941**	**$12,642**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$174,848
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	9.07%
B. Actual employer payroll	35,439
C. Payment to transition liability/(surplus)	3,214
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	9.07%
B. Actual employer payroll	30,922
C. Payment to transition liability/(surplus)	2,805
4. Supplemental payment to transition liability	0
5. Interest	13,506
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$182,335**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	182,335	174,848
2. Combined valuation payroll	156,351	158,680
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**10.35%**	**9.48%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	156,351	158,680
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Glide Fire Department/2824
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Glide Fire Department/2824

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Glide Fire Department/2824

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Glide Fire Department -- #2824

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Glide Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Glide Fire Department.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Glide Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.11%)	(5.11%)	(5.11%)	(5.11%)	(5.11%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.53%**	**15.53%**	**16.45%**	**7.09%**	**11.19%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.09%**	**16.09%**	**17.01%**	**7.57%**	**11.67%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.01%	6.21%	16.17%	6.54%	9.25%
July 1, 2013 to June 30, 2015	7.25%	7.25%	16.56%	7.74%	10.47%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Glide Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$52,901	$66,293
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(29,744)	(31,598)
Allocated pooled OPSRP UAL	3,642	710
Side account	0	0
Net unfunded pension actuarial accrued liability	26,799	35,405
Combined valuation payroll	51,668	41,585
Net pension UAL as a percentage of payroll	52%	85%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.11%)	(6.54%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,084	$1,077
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$16,804	$2,655	5.78%	$16,110	$931
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**16,804**	**2,655**		**16,110**	**931**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$16,804**	**$2,655**		**$16,110**	**$931**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($31,598)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.77%)
B. Actual employer payroll	34,359
C. Payment to transition liability/(surplus)	(1,983)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.77%)
B. Actual employer payroll	35,942
C. Payment to transition liability/(surplus)	(2,074)
4. Supplemental payment to transition liability	0
5. Interest	(2,203)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($29,744)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(29,744)	(31,598)
2. Combined valuation payroll	51,668	41,585
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.11%)**	**(6.54%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	51,668	41,585
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

Gilliam County/2022
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Gilliam County/2022

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Gilliam County/2022

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Gilliam County -- #2022

December 2013

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Executive Summary

Milliman has prepared this report for Gilliam County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Gilliam County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Gilliam County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.47%	13.02%	16.34%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.80%)	(0.80%)	(0.80%)	(0.80%)	(0.80%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.75%**	**15.30%**	**18.62%**	**9.64%**	**13.74%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.31%**	**15.86%**	**19.18%**	**10.12%**	**14.22%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.18%	11.30%	18.84%	9.80%	12.51%
July 1, 2013 to June 30, 2015	12.65%	11.52%	18.65%	9.81%	12.54%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Gilliam County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,921,308	$2,933,711
Allocated pre-SLGRP pooled liability/(surplus)	(371,825)	(375,519)
Transition liability/(surplus)	(169,900)	(173,793)
Allocated pooled OPSRP UAL	132,262	31,400
Side account	0	0
Net unfunded pension actuarial accrued liability	1,511,845	2,415,799
Combined valuation payroll	1,876,517	1,840,296
Net pension UAL as a percentage of payroll	81%	131%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.80%)	(0.81%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$39,370	$47,674
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$522,365	$82,534	5.78%	$630,486	$36,442
Tier 2 General Service	10.58%	593,545	62,797	10.42%	567,993	59,185
Total General Service		**1,115,910**	**145,331**		**1,198,479**	**95,627**
Tier 1 Police & Fire	17.89%	50,767	9,082	15.06%	48,325	7,278
Tier 2 Police & Fire	15.70%	123,409	19,375	15.12%	177,845	26,890
Total Police & Fire		**174,176**	**28,457**		**226,170**	**34,168**
Total		**$1,290,086**	**$173,788**		**$1,424,649**	**$129,795**
Employer normal cost rate						
General Service			**13.02%**			**7.98%**
Police & Fire			**16.34%**			**15.11%**
Aggregate (Default)			**13.47%**			**9.11%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($173,793)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.81%)
B. Actual employer payroll	979,383
C. Payment to transition liability/(surplus)	(7,933)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.81%)
B. Actual employer payroll	1,054,909
C. Payment to transition liability/(surplus)	(8,545)
4. Supplemental payment to transition liability	0
5. Interest	(12,585)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($169,900)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(169,900)	(173,793)
2. Combined valuation payroll	1,876,517	1,840,296
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.80%)**	**(0.81%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,876,517	1,840,296
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Farmers Irrigation District/2789
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Farmers Irrigation District/2789

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Farmers Irrigation District/2789

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Farmers Irrigation District -- #2789

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Farmers Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Farmers Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Farmers Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.91%	14.91%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(8.16%)	(8.16%)	(8.16%)	(8.16%)	(8.16%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.59%**	**11.59%**	**13.40%**	**4.04%**	**8.14%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.15%**	**12.15%**	**13.96%**	**4.52%**	**8.62%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.82%	5.82%	14.44%	5.21%	7.92%
July 1, 2013 to June 30, 2015	4.35%	4.35%	12.89%	4.07%	6.80%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Farmers Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$693,760	$992,009
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(623,178)	(625,245)
Allocated pooled OPSRP UAL	47,758	10,618
Side account	0	0
Net unfunded pension actuarial accrued liability	118,340	377,382
Combined valuation payroll	677,587	622,280
Net pension UAL as a percentage of payroll	17%	61%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(8.16%)	(8.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$14,216	$16,120
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$289,328	$45,714	5.78%	$282,254	$16,314
Tier 2 General Service	10.58%	59,335	6,278	10.42%	55,864	5,821
Total General Service		**348,663**	**51,992**		**338,118**	**22,135**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$348,663**	**$51,992**		**$338,118**	**$22,135**
Employer normal cost rate						
General Service			**14.91%**			**6.55%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.91%**			**6.55%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($625,245)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.10%)
B. Actual employer payroll	343,859
C. Payment to transition liability/(surplus)	(24,414)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.10%)
B. Actual employer payroll	335,408
C. Payment to transition liability/(surplus)	(23,814)
4. Supplemental payment to transition liability	0
5. Interest	(46,161)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($623,178)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(623,178)	(625,245)
2. Combined valuation payroll	677,587	622,280
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.16%)**	**(8.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	677,587	622,280
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Fairview Water District/2798
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Fairview Water District/2798

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Fairview Water District/2798

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Fairview Water District -- #2798

December 2013

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Executive Summary

Milliman has prepared this report for Fairview Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Fairview Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Fairview Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.34%)	(1.34%)	(1.34%)	(1.34%)	(1.34%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.54%**	**17.54%**	**18.46%**	**9.10%**	**13.20%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.10%**	**18.10%**	**19.02%**	**9.58%**	**13.68%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.84%	10.84%	18.66%	9.43%	12.14%
July 1, 2013 to June 30, 2015	10.67%	10.67%	19.98%	11.16%	13.89%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Fairview Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$92,463	$137,421
Allocated pre-SLGRP pooled liability/(surplus)	(17,894)	(17,590)
Transition liability/(surplus)	(13,649)	(13,652)
Allocated pooled OPSRP UAL	6,365	1,471
Side account	0	0
Net unfunded pension actuarial accrued liability	67,285	107,650
Combined valuation payroll	90,307	86,203
Net pension UAL as a percentage of payroll	75%	125%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.34%)	(1.36%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,895	$2,233
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$56,486	$8,925	5.78%	$60,233	$3,481
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**56,486**	**8,925**		**60,233**	**3,481**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$56,486**	**$8,925**		**$60,233**	**$3,481**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($13,652)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.18%)
B. Actual employer payroll	43,376
C. Payment to transition liability/(surplus)	(512)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.18%)
B. Actual employer payroll	42,594
C. Payment to transition liability/(surplus)	(502)
4. Supplemental payment to transition liability	0
5. Interest	(1,011)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($13,649)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(13,649)	(13,652)
2. Combined valuation payroll	90,307	86,203
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.34%)**	**(1.36%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	90,307	86,203
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Estacada Fire Department/2557
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Estacada Fire Department/2557

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Estacada Fire Department/2557

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Estacada Fire Department -- #2557

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Estacada Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Estacada Fire Department.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Estacada Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.46%	13.34%	17.46%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(17.84%)	(17.84%)	(17.84%)	(17.84%)	(17.84%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**2.70%**	**0.00%**	**2.70%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**3.26%**	**0.56%**	**3.26%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.84%	0.00%	1.84%	0.00%	0.00%
July 1, 2013 to June 30, 2015	1.96%	0.00%	1.96%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Estacada Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$785,949	$1,165,059
Allocated pre-SLGRP pooled liability/(surplus)	(152,102)	(149,129)
Transition liability/(surplus)	(1,543,348)	(1,546,501)
Allocated pooled OPSRP UAL	54,104	12,470
Side account	0	0
Net unfunded pension actuarial accrued liability	(855,397)	(518,101)
Combined valuation payroll	767,627	730,833
Net pension UAL as a percentage of payroll	(111%)	(71%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(17.84%)	(18.20%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$16,105	$18,933
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	345,048	61,729	15.06%	329,380	49,605
Tier 2 Police & Fire	15.70%	83,572	13,121	15.12%	74,285	11,232
Total Police & Fire		**428,620**	**74,850**		**403,665**	**60,837**
Total		**$428,620**	**$74,850**		**$403,665**	**$60,837**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.46%**			**15.07%**
Aggregate (Default)			**17.46%**			**15.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,546,501)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(18.31%)
B. Actual employer payroll	358,793
C. Payment to transition liability/(surplus)	(56,938)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(18.31%)
B. Actual employer payroll	381,576
C. Payment to transition liability/(surplus)	(60,537)
4. Supplemental payment to transition liability	0
5. Interest	(114,322)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,543,348)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,543,348)	(1,546,501)
2. Combined valuation payroll	767,627	730,833
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(17.84%)**	**(18.20%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	767,627	730,833
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Eisenschmidt Pool/2784
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Eisenschmidt Pool/2784

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Eisenschmidt Pool/2784

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Eisenschmidt Pool -- #2784

December 2013

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Executive Summary

Milliman has prepared this report for Eisenschmidt Pool to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Eisenschmidt Pool.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Eisenschmidt Pool

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.14%)	(4.14%)	(4.14%)	(4.14%)	(4.14%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.28%**	**11.28%**	**17.42%**	**8.06%**	**12.16%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.84%**	**11.84%**	**17.98%**	**8.54%**	**12.64%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.07%	11.07%	16.54%	7.31%	10.02%
July 1, 2013 to June 30, 2015	12.11%	12.11%	16.78%	7.96%	10.69%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Eisenschmidt Pool

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$179,761	$271,541
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(81,975)	(87,597)
Allocated pooled OPSRP UAL	12,375	2,906
Side account	0	0
Net unfunded pension actuarial accrued liability	110,161	186,850
Combined valuation payroll	175,570	170,336
Net pension UAL as a percentage of payroll	63%	110%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.14%)	(4.42%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,684	$4,413
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	111,517	11,798	10.42%	119,755	12,478
Total General Service		**111,517**	**11,798**		**119,755**	**12,478**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$111,517**	**$11,798**		**$119,755**	**$12,478**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($87,597)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.00%)
B. Actual employer payroll	108,993
C. Payment to transition liability/(surplus)	(5,450)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.00%)
B. Actual employer payroll	124,890
C. Payment to transition liability/(surplus)	(6,244)
4. Supplemental payment to transition liability	0
5. Interest	(6,072)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($81,975)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(81,975)	(87,597)
2. Combined valuation payroll	175,570	170,336
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.14%)**	**(4.42%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	175,570	170,336
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

East Umatilla County Rural Fire Protection District/2851
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
East Umatilla County Rural Fire Protection District/2851

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
East Umatilla County Rural Fire Protection District/2851

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

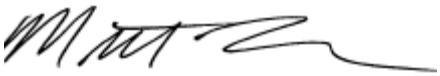
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

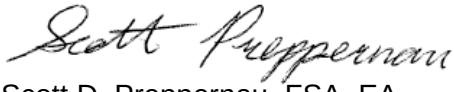
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

East Umatilla County Rural Fire Protection District -- #2851

December 2013

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Executive Summary

Milliman has prepared this report for East Umatilla County Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to East Umatilla County Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for East Umatilla County Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(5.13%)	(5.13%)	(5.13%)	(5.13%)	(5.13%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.65%**	**11.29%**	**13.65%**	**5.31%**	**9.41%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.21%**	**11.85%**	**14.21%**	**5.79%**	**9.89%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.17%	6.81%	14.17%	5.36%	8.07%
July 1, 2013 to June 30, 2015	14.88%	7.68%	14.88%	6.03%	8.76%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

East Umatilla County Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$49,232	$84,155
Allocated pre-SLGRP pooled liability/(surplus)	(9,528)	(10,772)
Transition liability/(surplus)	(27,823)	(28,173)
Allocated pooled OPSRP UAL	3,389	901
Side account	0	0
Net unfunded pension actuarial accrued liability	15,270	46,111
Combined valuation payroll	48,084	52,790
Net pension UAL as a percentage of payroll	32%	87%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(5.13%)	(4.59%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,009	$1,368
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	48,084	7,549	15.12%	52,790	7,982
Total Police & Fire		**48,084**	**7,549**		**52,790**	**7,982**
Total		**$48,084**	**$7,549**		**$52,790**	**$7,982**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($28,173)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.25%)
B. Actual employer payroll	24,350
C. Payment to transition liability/(surplus)	(1,278)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.25%)
B. Actual employer payroll	21,578
C. Payment to transition liability/(surplus)	(1,133)
4. Supplemental payment to transition liability	0
5. Interest	(2,061)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($27,823)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(27,823)	(28,173)
2. Combined valuation payroll	48,084	52,790
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.13%)**	**(4.59%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	48,084	52,790
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Dexter Rural Fire Protection District/2642
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Dexter Rural Fire Protection District/2642

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Dexter Rural Fire Protection District/2642

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Dexter Rural Fire Protection District -- #2642

December 2013

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Executive Summary

Milliman has prepared this report for Dexter Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Dexter Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Dexter Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.85%)	(2.85%)	(2.85%)	(2.85%)	(2.85%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.12%**	**13.57%**	**18.12%**	**7.59%**	**11.69%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.68%**	**14.13%**	**18.68%**	**8.07%**	**12.17%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.27%	9.07%	17.27%	7.62%	10.33%
July 1, 2013 to June 30, 2015	17.04%	9.90%	17.04%	8.25%	10.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Dexter Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$64,648	$87,425
Allocated pre-SLGRP pooled liability/(surplus)	(12,511)	(11,191)
Transition liability/(surplus)	(20,307)	(20,616)
Allocated pooled OPSRP UAL	4,450	936
Side account	0	0
Net unfunded pension actuarial accrued liability	36,280	56,554
Combined valuation payroll	63,141	54,841
Net pension UAL as a percentage of payroll	57%	103%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.85%)	(3.23%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,325	$1,421
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	63,141	11,296	15.06%	54,841	8,259
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**63,141**	**11,296**		**54,841**	**8,259**
Total		**$63,141**	**$11,296**		**$54,841**	**$8,259**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($20,616)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.99%)
B. Actual employer payroll	29,375
C. Payment to transition liability/(surplus)	(878)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.99%)
B. Actual employer payroll	31,250
C. Payment to transition liability/(surplus)	(935)
4. Supplemental payment to transition liability	0
5. Interest	(1,504)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($20,307)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(20,307)	(20,616)
2. Combined valuation payroll	63,141	54,841
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.85%)**	**(3.23%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	63,141	54,841
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Deschutes County/2027
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Deschutes County/2027

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Deschutes County/2027

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Deschutes County -- #2027

December 2013

Secondary Employers

2770 Deschutes County Fair Association

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Deschutes County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Deschutes County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Deschutes County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.12%	12.99%	16.77%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.06%)	(5.06%)	(5.06%)	(5.06%)	(5.06%)
Side account rate relief [2]	(0.96%)	(0.96%)	(0.96%)	(0.96%)	(0.96%)
Net pension contribution rate	**12.94%**	**11.81%**	**15.59%**	**6.18%**	**10.28%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.50%**	**12.37%**	**16.15%**	**6.66%**	**10.76%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.74%	7.64%	15.24%	5.97%	8.68%
July 1, 2013 to June 30, 2015	10.25%	8.19%	15.03%	6.21%	8.94%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Deschutes County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$55,941,801	$83,170,271
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(31,165,176)	(31,808,214)
Allocated pooled OPSRP UAL	3,851,012	890,180
Side account	5,909,683	5,643,078
Net unfunded pension actuarial accrued liability	22,717,954	46,609,159
Combined valuation payroll	54,637,656	52,172,118
Net pension UAL as a percentage of payroll	42%	89%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.06%)	(5.24%)
Side account rate relief	(0.96%)	(0.93%)
Allocated pooled RHIA UAL	$1,146,321	$1,351,545
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$10,371,434	$1,638,687	5.78%	$10,663,196	$616,333
Tier 2 General Service	10.58%	12,069,550	1,276,958	10.42%	12,179,316	1,269,085
Total General Service		**22,440,984**	**2,915,645**		**22,842,512**	**1,885,418**
Tier 1 Police & Fire	17.89%	4,682,797	837,752	15.06%	5,134,060	773,189
Tier 2 Police & Fire	15.70%	4,870,008	764,591	15.12%	4,708,478	711,922
Total Police & Fire		**9,552,805**	**1,602,343**		**9,842,538**	**1,485,111**
Total		**$31,993,789**	**$4,517,988**		**$32,685,050**	**$3,370,529**
Employer normal cost rate						
General Service			**12.99%**			**8.25%**
Police & Fire			**16.77%**			**15.09%**
Aggregate (Default)			**14.12%**			**10.31%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($31,808,214)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.35%)
B. Actual employer payroll	27,359,978
C. Payment to transition liability/(surplus)	(1,463,759)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.35%)
B. Actual employer payroll	27,809,569
C. Payment to transition liability/(surplus)	(1,487,811)
4. Supplemental payment to transition liability	0
5. Interest	(2,308,532)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($31,165,176)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(31,165,176)	(31,808,214)
2. Combined valuation payroll	54,637,656	52,172,118
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.06%)**	**(5.24%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$5,643,078**	**$5,643,078**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(524,756)	(524,756)
5. Side account earnings during 2012		792,361	792,361
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$5,909,683**	**$5,909,683**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$5,909,683	$5,643,078
Side Account 2	0	0
Side Account 3	0	0
Total	**$5,909,683**	**$5,643,078**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$5,909,683	$5,643,078
2. Combined valuation payroll	54,637,656	52,172,118
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(0.96%)	(0.93%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Portland, OR 97204-3654
503 227 0634

December 2013

Deschutes County Rural Fire Protection District #2/2822
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Deschutes County Rural Fire Protection District #2/2822

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Deschutes County Rural Fire Protection District #2/2822

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

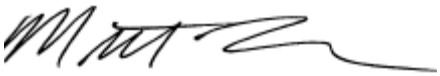
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

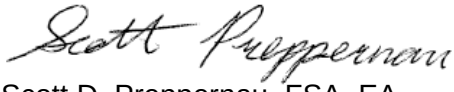
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Deschutes County Rural Fire Protection District #2 -- #2822

December 2013

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Executive Summary

Milliman has prepared this report for Deschutes County Rural Fire Protection District #2 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Deschutes County Rural Fire Protection District #2.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Deschutes County Rural Fire Protection District #2

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.41%)	(0.41%)	(0.41%)	(0.41%)	(0.41%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.25%**	**13.25%**	**19.39%**	**10.03%**	**14.13%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.81%**	**13.81%**	**19.95%**	**10.51%**	**14.61%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.99%	13.99%	19.46%	10.23%	12.94%
July 1, 2013 to June 30, 2015	14.36%	14.36%	19.03%	10.21%	12.94%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Deschutes County Rural Fire Protection District #2

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$111,515	$172,215
Allocated pre-SLGRP pooled liability/(surplus)	(21,581)	(22,044)
Transition liability/(surplus)	(5,066)	(5,087)
Allocated pooled OPSRP UAL	7,677	1,843
Side account	0	0
Net unfunded pension actuarial accrued liability	92,545	146,927
Combined valuation payroll	108,915	108,029
Net pension UAL as a percentage of payroll	85%	136%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.41%)	(0.41%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,285	$2,799
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	108,915	11,523	10.42%	108,029	11,257
Total General Service		**108,915**	**11,523**		**108,029**	**11,257**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$108,915**	**$11,523**		**$108,029**	**$11,257**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($5,087)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.38%)
B. Actual employer payroll	51,683
C. Payment to transition liability/(surplus)	(196)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.38%)
B. Actual employer payroll	52,631
C. Payment to transition liability/(surplus)	(200)
4. Supplemental payment to transition liability	0
5. Interest	(375)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($5,066)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(5,066)	(5,087)
2. Combined valuation payroll	108,915	108,029
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.41%)**	**(0.41%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	108,915	108,029
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Depoe Bay Rural Fire Protection District/2576
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Depoe Bay Rural Fire Protection District/2576

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Depoe Bay Rural Fire Protection District/2576

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Depoe Bay Rural Fire Protection District -- #2576

December 2013

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Executive Summary

Milliman has prepared this report for Depoe Bay Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Depoe Bay Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Depoe Bay Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.83%	15.83%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.46%)	(1.46%)	(1.46%)	(1.46%)	(1.46%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.45%**	**17.45%**	**18.34%**	**8.98%**	**13.08%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.01%**	**18.01%**	**18.90%**	**9.46%**	**13.56%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.42%	10.11%	17.89%	8.66%	11.37%
July 1, 2013 to June 30, 2015	11.87%	10.64%	17.81%	8.99%	11.72%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Depoe Bay Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$324,005	$468,497
Allocated pre-SLGRP pooled liability/(surplus)	(62,704)	(59,968)
Transition liability/(surplus)	(52,086)	(55,583)
Allocated pooled OPSRP UAL	22,304	5,014
Side account	0	0
Net unfunded pension actuarial accrued liability	231,519	357,960
Combined valuation payroll	316,452	293,885
Net pension UAL as a percentage of payroll	73%	122%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.46%)	(1.63%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,639	$7,613
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,529	$242	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**1,529**	**242**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$1,529**	**$242**		**$0**	**$0**
Employer normal cost rate						
General Service			**15.83%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.83%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($55,583)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.95%)
B. Actual employer payroll	171,676
C. Payment to transition liability/(surplus)	(3,348)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.95%)
B. Actual employer payroll	205,494
C. Payment to transition liability/(surplus)	(4,007)
4. Supplemental payment to transition liability	0
5. Interest	(3,858)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($52,086)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(52,086)	(55,583)
2. Combined valuation payroll	316,452	293,885
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.46%)**	**(1.63%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	316,452	293,885
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Curry Library/2718
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
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This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Curry Library -- #2718

December 2013

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Executive Summary

Milliman has prepared this report for Curry Library to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Curry Library.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Curry Library

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(21.44%)	(21.44%)	(21.44%)	(21.44%)	(21.44%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.12%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.68%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	5.08%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

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	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$94,636	$36,342
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(223,368)	(222,652)
Allocated pooled OPSRP UAL	6,515	389
Side account	0	0
Net unfunded pension actuarial accrued liability	(122,217)	(185,921)
Combined valuation payroll	92,430	22,797
Net pension UAL as a percentage of payroll	(132%)	(816%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(21.44%)	(84.01%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,939	$591
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	24,300	2,571	10.42%	22,797	2,375
Total General Service		**24,300**	**2,571**		**22,797**	**2,375**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$24,300**	**$2,571**		**$22,797**	**$2,375**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($222,652)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(14.24%)
B. Actual employer payroll	58,453
C. Payment to transition liability/(surplus)	(7,730)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(14.24%)
B. Actual employer payroll	61,193
C. Payment to transition liability/(surplus)	(8,100)
4. Supplemental payment to transition liability	0
5. Interest	(16,546)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($223,368)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(223,368)	(222,652)
2. Combined valuation payroll	92,430	22,797
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(21.44%)**	**(84.01%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	92,430	22,797
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Crystal Springs Water District/2571
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Crystal Springs Water District/2571

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Crystal Springs Water District/2571

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Crystal Springs Water District -- #2571

December 2013

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Executive Summary

Milliman has prepared this report for Crystal Springs Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Crystal Springs Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Crystal Springs Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.75%	13.75%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.83%**	**16.83%**	**19.80%**	**10.44%**	**14.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.39%**	**17.39%**	**20.36%**	**10.92%**	**15.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.34%	11.34%	19.75%	10.52%	13.23%
July 1, 2013 to June 30, 2015	11.49%	11.49%	19.05%	10.23%	12.96%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Crystal Springs Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$321,992	$407,323
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(62,370)	(63,776)
Allocated pooled OPSRP UAL	22,166	4,360
Side account	0	0
Net unfunded pension actuarial accrued liability	281,788	347,907
Combined valuation payroll	314,486	255,511
Net pension UAL as a percentage of payroll	90%	136%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.76%)	(2.15%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,598	$6,619
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$137,593	$21,740	5.78%	$132,765	$7,674
Tier 2 General Service	10.58%	88,866	9,402	10.42%	80,489	8,387
Total General Service		**226,459**	**31,142**		**213,254**	**16,061**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$226,459**	**$31,142**		**$213,254**	**$16,061**
Employer normal cost rate						
General Service			**13.75%**			**7.53%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.75%**			**7.53%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($63,776)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.79%)
B. Actual employer payroll	158,613
C. Payment to transition liability/(surplus)	(2,839)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.79%)
B. Actual employer payroll	178,005
C. Payment to transition liability/(surplus)	(3,187)
4. Supplemental payment to transition liability	0
5. Interest	(4,620)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($62,370)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(62,370)	(63,776)
2. Combined valuation payroll	314,486	255,511
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.76%)**	**(2.15%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	314,486	255,511
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Portland, OR 97204-3654
503 227 0634

December 2013

Crooked River Ranch Rural Fire Protection District/2647
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Crooked River Ranch Rural Fire Protection District/2647

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Crooked River Ranch Rural Fire Protection District/2647

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Crooked River Ranch Rural Fire Protection District -- #2647

December 2013

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Executive Summary

Milliman has prepared this report for Crooked River Ranch Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Crooked River Ranch Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Crooked River Ranch Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.31%)	(1.31%)	(1.31%)	(1.31%)	(1.31%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.70%**	**15.11%**	**18.49%**	**9.13%**	**13.23%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.26%**	**15.67%**	**19.05%**	**9.61%**	**13.71%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.77%	12.77%	18.24%	9.01%	11.72%
July 1, 2013 to June 30, 2015	13.03%	11.80%	18.97%	10.15%	12.88%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Crooked River Ranch Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$306,082	$459,022
Allocated pre-SLGRP pooled liability/(surplus)	(59,235)	(58,755)
Transition liability/(surplus)	(44,033)	(45,293)
Allocated pooled OPSRP UAL	21,071	4,913
Side account	0	0
Net unfunded pension actuarial accrued liability	223,885	359,887
Combined valuation payroll	298,946	287,941
Net pension UAL as a percentage of payroll	75%	125%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.31%)	(1.35%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,272	$7,459
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($45,293)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.60%)
B. Actual employer payroll	136,295
C. Payment to transition liability/(surplus)	(2,181)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.60%)
B. Actual employer payroll	146,305
C. Payment to transition liability/(surplus)	(2,341)
4. Supplemental payment to transition liability	0
5. Interest	(3,262)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($44,033)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(44,033)	(45,293)
2. Combined valuation payroll	298,946	287,941
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.31%)**	**(1.35%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	298,946	287,941
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Crook County/2044
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Crook County/2044

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
Crook County/2044

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Crook County -- #2044

December 2013

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Executive Summary

Milliman has prepared this report for Crook County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Crook County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Crook County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.70%	13.34%	16.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.56%)	(9.56%)	(9.56%)	(9.56%)	(9.56%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.98%**	**8.62%**	**11.98%**	**2.64%**	**6.74%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.54%**	**9.18%**	**12.54%**	**3.12%**	**7.22%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.57%	5.89%	13.57%	4.44%	7.15%
July 1, 2013 to June 30, 2015	11.43%	4.25%	11.43%	2.60%	5.33%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Crook County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,343,336	$1,945,935
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,413,644)	(1,430,752)
Allocated pooled OPSRP UAL	92,475	20,828
Side account	0	0
Net unfunded pension actuarial accrued liability	22,167	536,011
Combined valuation payroll	1,312,019	1,220,671
Net pension UAL as a percentage of payroll	2%	44%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.56%)	(10.08%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$27,527	$31,622
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	342,341	61,245	15.06%	299,793	45,149
Tier 2 Police & Fire	15.70%	409,903	64,355	15.12%	431,684	65,271
Total Police & Fire		**752,244**	**125,600**		**731,477**	**110,420**
Total		**$752,244**	**$125,600**		**$731,477**	**$110,420**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.70%**			**15.10%**
Aggregate (Default)			**16.70%**			**15.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,430,752)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.87%)
B. Actual employer payroll	757,359
C. Payment to transition liability/(surplus)	(59,604)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.87%)
B. Actual employer payroll	790,570
C. Payment to transition liability/(surplus)	(62,218)
4. Supplemental payment to transition liability	0
5. Interest	(104,714)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,413,644)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,413,644)	(1,430,752)
2. Combined valuation payroll	1,312,019	1,220,671
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.56%)**	**(10.08%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,312,019	1,220,671
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Crook County Rural Fire Protection District #1/2844
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Crook County Rural Fire Protection District #1/2844

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Crook County Rural Fire Protection District #1/2844

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Crook County Rural Fire Protection District #1 -- #2844

December 2013

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Executive Summary

Milliman has prepared this report for Crook County Rural Fire Protection District #1 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Crook County Rural Fire Protection District #1.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Crook County Rural Fire Protection District #1

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.40%	10.58%	16.20%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.44%)	(0.44%)	(0.44%)	(0.44%)	(0.44%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.04%**	**13.22%**	**18.84%**	**10.00%**	**14.10%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.60%**	**13.78%**	**19.40%**	**10.48%**	**14.58%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.56%	13.92%	19.42%	10.16%	12.87%
July 1, 2013 to June 30, 2015	18.40%	14.38%	19.07%	10.23%	12.96%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Crook County Rural Fire Protection District #1

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,049,990	$1,142,259
Allocated pre-SLGRP pooled liability/(surplus)	(203,201)	(146,211)
Transition liability/(surplus)	(50,393)	(51,429)
Allocated pooled OPSRP UAL	72,281	12,226
Side account	0	0
Net unfunded pension actuarial accrued liability	868,677	956,845
Combined valuation payroll	1,025,512	716,531
Net pension UAL as a percentage of payroll	85%	134%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.44%)	(0.62%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$21,516	$18,562
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	61,679	6,526	10.42%	58,479	6,094
Total General Service		**61,679**	**6,526**		**58,479**	**6,094**
Tier 1 Police & Fire	17.89%	85,566	15,308	15.06%	82,292	12,393
Tier 2 Police & Fire	15.70%	287,792	45,183	15.12%	268,196	40,551
Total Police & Fire		**373,358**	**60,491**		**350,488**	**52,944**
Total		**$435,037**	**$67,017**		**$408,967**	**$59,038**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.20%**			**15.11%**
Aggregate (Default)			**15.40%**			**14.44%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($51,429)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.45%)
B. Actual employer payroll	517,758
C. Payment to transition liability/(surplus)	(2,330)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.45%)
B. Actual employer payroll	542,043
C. Payment to transition liability/(surplus)	(2,439)
4. Supplemental payment to transition liability	0
5. Interest	(3,733)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($50,393)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(50,393)	(51,429)
2. Combined valuation payroll	1,025,512	716,531
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.44%)**	**(0.62%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,025,512	716,531
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Crescent Rural Fire Protection District/2834
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Crescent Rural Fire Protection District/2834

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Crescent Rural Fire Protection District/2834

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Crescent Rural Fire Protection District -- #2834

December 2013

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Executive Summary

Milliman has prepared this report for Crescent Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Crescent Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Crescent Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.47%)	(1.47%)	(1.47%)	(1.47%)	(1.47%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.26%**	**16.71%**	**21.26%**	**10.73%**	**14.83%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.82%**	**17.27%**	**21.82%**	**11.21%**	**15.31%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.25%	10.05%	18.25%	8.60%	11.31%
July 1, 2013 to June 30, 2015	20.12%	12.98%	20.12%	11.33%	14.06%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Crescent Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$214,205	$282,077
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(34,672)	(39,353)
Allocated pooled OPSRP UAL	14,746	3,019
Side account	0	0
Net unfunded pension actuarial accrued liability	194,279	245,743
Combined valuation payroll	209,211	176,945
Net pension UAL as a percentage of payroll	93%	139%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.47%)	(1.91%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,389	$4,584
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	60,864	10,889	15.06%	64,961	9,783
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**60,864**	**10,889**		**64,961**	**9,783**
Total		**$60,864**	**$10,889**		**$64,961**	**$9,783**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($39,353)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.71%)
B. Actual employer payroll	94,961
C. Payment to transition liability/(surplus)	(3,523)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.71%)
B. Actual employer payroll	100,437
C. Payment to transition liability/(surplus)	(3,726)
4. Supplemental payment to transition liability	0
5. Interest	(2,568)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($34,672)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(34,672)	(39,353)
2. Combined valuation payroll	209,211	176,945
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.47%)**	**(1.91%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	209,211	176,945
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Portland, OR 97204-3654
503 227 0634

December 2013

Council of Governments/2545
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Council of Governments/2545

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Council of Governments/2545

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

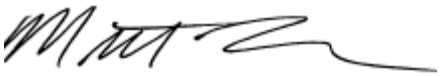
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

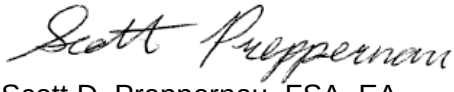
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Council of Governments -- #2545

December 2013

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Executive Summary

Milliman has prepared this report for Council of Governments to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Council of Governments.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Council of Governments

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.05%	13.05%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.01%)	(0.01%)	(0.01%)	(0.01%)	(0.01%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.12%**	**16.12%**	**19.79%**	**10.43%**	**14.53%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.68%**	**16.68%**	**20.35%**	**10.91%**	**15.01%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.31%	12.31%	19.83%	10.60%	13.31%
July 1, 2013 to June 30, 2015	12.47%	12.47%	19.43%	10.61%	13.34%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Council of Governments

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,488,669	$8,150,912
Allocated pre-SLGRP pooled liability/(surplus)	(1,062,206)	(1,043,329)
Transition liability/(surplus)	(7,935)	(7,911)
Allocated pooled OPSRP UAL	377,838	87,240
Side account	0	0
Net unfunded pension actuarial accrued liability	4,796,366	7,186,912
Combined valuation payroll	5,360,714	5,113,009
Net pension UAL as a percentage of payroll	89%	141%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.01%)	(0.01%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$112,470	$132,455
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,207,110	$190,723	5.78%	$1,377,546	$79,622
Tier 2 General Service	10.58%	1,339,999	141,772	10.42%	1,410,188	146,942
Total General Service		**2,547,109**	**332,495**		**2,787,734**	**226,564**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$2,547,109**	**$332,495**		**$2,787,734**	**$226,564**
Employer normal cost rate						
General Service			**13.05%**			**8.13%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.05%**			**8.13%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($7,911)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.01%)
B. Actual employer payroll	2,769,152
C. Payment to transition liability/(surplus)	(277)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.01%)
B. Actual employer payroll	2,862,430
C. Payment to transition liability/(surplus)	(287)
4. Supplemental payment to transition liability	0
5. Interest	(588)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($7,935)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(7,935)	(7,911)
2. Combined valuation payroll	5,360,714	5,113,009
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.01%)**	**(0.01%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	5,360,714	5,113,009
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Corbett Water District/2603
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Corbett Water District/2603

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Corbett Water District/2603

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Corbett Water District -- #2603

December 2013

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Executive Summary

Milliman has prepared this report for Corbett Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Corbett Water District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Corbett Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.01%**	**16.42%**	**19.80%**	**10.44%**	**14.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.57%**	**16.98%**	**20.36%**	**10.92%**	**15.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.37%	12.06%	19.84%	10.61%	13.32%
July 1, 2013 to June 30, 2015	13.50%	12.27%	19.44%	10.62%	13.35%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Corbett Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$207,863	$319,937
Allocated pre-SLGRP pooled liability/(surplus)	(40,227)	(40,952)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	14,309	3,424
Side account	0	0
Net unfunded pension actuarial accrued liability	181,945	282,409
Combined valuation payroll	203,017	200,694
Net pension UAL as a percentage of payroll	90%	141%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,259	$5,199
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	203,017	200,694
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	203,017	200,694
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Coos County/2018
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Coos County/2018

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Coos County/2018

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Coos County -- #2018

December 2013

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Executive Summary

Milliman has prepared this report for Coos County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Coos County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Coos County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.62%	13.36%	16.79%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.98%	0.98%	0.98%	0.98%	0.98%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.44%**	**19.18%**	**22.61%**	**13.18%**	**17.28%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.00%**	**19.74%**	**23.17%**	**13.66%**	**17.76%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.11%	14.71%	22.43%	13.16%	15.87%
July 1, 2013 to June 30, 2015	17.42%	15.09%	22.12%	13.30%	16.03%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Coos County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$12,636,883	$20,502,602
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	1,368,847	1,380,914
Allocated pooled OPSRP UAL	869,918	219,441
Side account	0	0
Net unfunded pension actuarial accrued liability	14,875,648	22,102,957
Combined valuation payroll	12,342,285	12,861,136
Net pension UAL as a percentage of payroll	121%	172%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.98%	0.92%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$258,946	$333,174
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,784,084	$439,885	5.78%	$3,105,479	$179,497
Tier 2 General Service	10.58%	2,448,596	259,061	10.42%	2,994,058	311,981
Total General Service		**5,232,680**	**698,946**		**6,099,537**	**491,478**
Tier 1 Police & Fire	17.89%	1,517,392	271,461	15.06%	1,627,652	245,124
Tier 2 Police & Fire	15.70%	1,531,500	240,446	15.12%	1,407,388	212,797
Total Police & Fire		**3,048,892**	**511,907**		**3,035,040**	**457,921**
Total		**$8,281,572**	**$1,210,853**		**$9,134,577**	**$949,399**
Employer normal cost rate						
General Service			**13.36%**			**8.06%**
Police & Fire			**16.79%**			**15.09%**
Aggregate (Default)			**14.62%**			**10.39%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$1,380,914
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.85%
B. Actual employer payroll	6,745,419
C. Payment to transition liability/(surplus)	57,336
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.85%
B. Actual employer payroll	6,603,151
C. Payment to transition liability/(surplus)	56,127
4. Supplemental payment to transition liability	0
5. Interest	101,396
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$1,368,847**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	1,368,847	1,380,914
2. Combined valuation payroll	12,342,285	12,861,136
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.98%**	**0.92%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	12,342,285	12,861,136
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Coos County Airport District/2860
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Coos County Airport District/2860

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Coos County Airport District/2860

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Coos County Airport District -- #2860

December 2013

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Executive Summary

Milliman has prepared this report for Coos County Airport District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Coos County Airport District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Coos County Airport District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.88%)	(5.88%)	(5.88%)	(5.88%)	(5.88%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.54%**	**9.54%**	**15.68%**	**6.32%**	**10.42%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.10%**	**10.10%**	**16.24%**	**6.80%**	**10.90%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.29%	10.29%	15.76%	6.53%	9.24%
July 1, 2013 to June 30, 2015	9.85%	9.85%	14.52%	5.70%	8.43%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Coos County Airport District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$631,971	$847,135
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(408,981)	(412,678)
Allocated pooled OPSRP UAL	43,505	9,067
Side account	0	0
Net unfunded pension actuarial accrued liability	266,495	443,524
Combined valuation payroll	617,238	531,402
Net pension UAL as a percentage of payroll	43%	83%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.88%)	(6.68%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$12,950	$13,766
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	119,494	12,642	10.42%	116,583	12,148
Total General Service		**119,494**	**12,642**		**116,583**	**12,148**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$119,494**	**$12,642**		**$116,583**	**$12,148**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($412,678)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.78%)
B. Actual employer payroll	290,422
C. Payment to transition liability/(surplus)	(16,786)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.78%)
B. Actual employer payroll	297,674
C. Payment to transition liability/(surplus)	(17,206)
4. Supplemental payment to transition liability	0
5. Interest	(30,295)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($408,981)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(408,981)	(412,678)
2. Combined valuation payroll	617,238	531,402
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.88%)**	**(6.68%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	617,238	531,402
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Community Services Consortium/2612
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Community Services Consortium/2612

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Community Services Consortium/2612

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Community Services Consortium -- #2612

December 2013

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Executive Summary

Milliman has prepared this report for Community Services Consortium to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Community Services Consortium.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Community Services Consortium

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.57%	12.57%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.28%)	(1.28%)	(1.28%)	(1.28%)	(1.28%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.37%**	**14.37%**	**18.52%**	**9.16%**	**13.26%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.93%**	**14.93%**	**19.08%**	**9.64%**	**13.74%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.64%	11.64%	18.89%	9.66%	12.37%
July 1, 2013 to June 30, 2015	11.80%	11.80%	18.29%	9.47%	12.20%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Community Services Consortium

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,420,403	$7,435,505
Allocated pre-SLGRP pooled liability/(surplus)	(855,467)	(951,756)
Transition liability/(surplus)	(622,211)	(622,637)
Allocated pooled OPSRP UAL	304,299	79,583
Side account	0	0
Net unfunded pension actuarial accrued liability	3,247,024	5,940,695
Combined valuation payroll	4,317,352	4,664,239
Net pension UAL as a percentage of payroll	75%	127%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.28%)	(1.15%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$90,580	$120,829
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$750,853	$118,635	5.78%	$931,312	$53,830
Tier 2 General Service	10.58%	1,216,766	128,734	10.42%	1,438,587	149,901
Total General Service		**1,967,619**	**247,369**		**2,369,899**	**203,731**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$1,967,619**	**$247,369**		**$2,369,899**	**$203,731**
Employer normal cost rate						
General Service			**12.57%**			**8.60%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.57%**			**8.60%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($622,637)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.95%)
B. Actual employer payroll	2,558,318
C. Payment to transition liability/(surplus)	(24,304)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.95%)
B. Actual employer payroll	2,338,097
C. Payment to transition liability/(surplus)	(22,212)
4. Supplemental payment to transition liability	0
5. Interest	(46,090)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($622,211)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(622,211)	(622,637)
2. Combined valuation payroll	4,317,352	4,664,239
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.28%)**	**(1.15%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	4,317,352	4,664,239
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Columbia River Fire & Rescue/2528
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Columbia River Fire & Rescue/2528

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Columbia River Fire & Rescue/2528

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Columbia River Fire & Rescue -- #2528

December 2013

Secondary Employers

2577 Rainier Fire Department

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Executive Summary

Milliman has prepared this report for Columbia River Fire & Rescue to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Columbia River Fire & Rescue.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Columbia River Fire & Rescue

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.45%	10.58%	16.62%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(6.29%)	(6.29%)	(6.29%)	(6.29%)	(6.29%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.24%**	**7.37%**	**13.41%**	**4.15%**	**8.25%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.80%**	**7.93%**	**13.97%**	**4.63%**	**8.73%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.78%	8.51%	14.00%	4.75%	7.46%
July 1, 2013 to June 30, 2015	13.57%	9.03%	13.70%	4.88%	7.61%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Columbia River Fire & Rescue

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,911,378	$6,144,843
Allocated pre-SLGRP pooled liability/(surplus)	(756,957)	(786,549)
Transition liability/(surplus)	(2,706,496)	(2,726,069)
Allocated pooled OPSRP UAL	269,258	65,769
Side account	0	0
Net unfunded pension actuarial accrued liability	717,183	2,697,994
Combined valuation payroll	3,820,194	3,854,616
Net pension UAL as a percentage of payroll	19%	70%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(6.29%)	(6.08%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$80,149	$99,856
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	71,175	7,530	10.42%	71,873	7,489
Total General Service		**71,175**	**7,530**		**71,873**	**7,489**
Tier 1 Police & Fire	17.89%	1,043,900	186,754	15.06%	1,054,657	158,831
Tier 2 Police & Fire	15.70%	1,449,177	227,521	15.12%	1,454,812	219,968
Total Police & Fire		**2,493,077**	**414,275**		**2,509,469**	**378,799**
Total		**$2,564,252**	**$421,805**		**$2,581,342**	**$386,288**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.62%**			**15.09%**
Aggregate (Default)			**16.45%**			**14.96%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($2,726,069)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.86%)
B. Actual employer payroll	1,858,271
C. Payment to transition liability/(surplus)	(108,895)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.86%)
B. Actual employer payroll	1,896,909
C. Payment to transition liability/(surplus)	(111,159)
4. Supplemental payment to transition liability	0
5. Interest	(200,481)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($2,706,496)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(2,706,496)	(2,726,069)
2. Combined valuation payroll	3,820,194	3,854,616
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.29%)**	**(6.08%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,820,194	3,854,616
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Columbia Gorge Community College/2996
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Columbia Gorge Community College/2996

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Columbia Gorge Community College/2996

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Columbia Gorge Community College -- #2996

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Columbia Gorge Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Columbia Gorge Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Columbia Gorge Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(6.13%)	(6.13%)	(6.13%)	(6.13%)	(6.13%)
Net pension contribution rate	**13.71%**	**13.71%**	**17.28%**	**7.92%**	**12.02%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.27%**	**14.27%**	**17.84%**	**8.40%**	**12.50%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.04%	10.04%	17.70%	8.47%	11.18%
July 1, 2013 to June 30, 2015	10.43%	10.43%	17.45%	8.63%	11.36%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Columbia Gorge Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,912,843	$7,693,679
Allocated pre-SLGRP pooled liability/(surplus)	1,000,402	1,045,640
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	338,198	82,346
Side account	3,317,389	3,146,038
Net unfunded pension actuarial accrued liability	2,934,054	5,675,627
Combined valuation payroll	4,798,312	4,826,190
Net pension UAL as a percentage of payroll	61%	118%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(6.13%)	(5.61%)
Allocated pooled RHIA UAL	$100,671	$125,025
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$3,146,038**	**$3,146,038**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(270,836)	(270,836)
5. Side account earnings during 2012		443,186	443,186
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$3,317,389**	**$3,317,389**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$3,317,389	$3,146,038
Side Account 2	0	0
Side Account 3	0	0
Total	**$3,317,389**	**$3,146,038**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$3,317,389	$3,146,038
2. Combined valuation payroll	4,798,312	4,826,190
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(6.13%)	(5.61%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Columbia Drainage Vector Control District/2687
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Columbia Drainage Vector Control District/2687

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Columbia Drainage Vector Control District/2687

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Columbia Drainage Vector Control District -- #2687

December 2013

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Executive Summary

Milliman has prepared this report for Columbia Drainage Vector Control District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Columbia Drainage Vector Control District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Columbia Drainage Vector Control District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.47%	13.47%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	12.68%	12.68%	12.68%	12.68%	12.68%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**29.23%**	**29.23%**	**32.48%**	**23.12%**	**27.22%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**29.79%**	**29.79%**	**33.04%**	**23.60%**	**27.70%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	23.69%	23.69%	30.93%	21.70%	24.41%
July 1, 2013 to June 30, 2015	25.98%	25.98%	33.21%	24.39%	27.12%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Columbia Drainage Vector Control District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$133,190	$191,443
Allocated pre-SLGRP pooled liability/(surplus)	(25,776)	(24,505)
Transition liability/(surplus)	185,918	186,709
Allocated pooled OPSRP UAL	9,169	2,049
Side account	0	0
Net unfunded pension actuarial accrued liability	302,501	355,696
Combined valuation payroll	130,085	120,091
Net pension UAL as a percentage of payroll	233%	296%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	12.68%	13.37%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,729	$3,111
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$71,899	$11,360	5.78%	$66,338	$3,834
Tier 2 General Service	10.58%	58,186	6,156	10.42%	53,753	5,601
Total General Service		**130,085**	**17,516**		**120,091**	**9,435**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$130,085**	**$17,516**		**$120,091**	**$9,435**
Employer normal cost rate						
General Service			**13.47%**			**7.86%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.47%**			**7.86%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$186,709
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	11.09%
B. Actual employer payroll	60,123
C. Payment to transition liability/(surplus)	6,668
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	11.09%
B. Actual employer payroll	71,198
C. Payment to transition liability/(surplus)	7,895
4. Supplemental payment to transition liability	0
5. Interest	13,772
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$185,918**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	185,918	186,709
2. Combined valuation payroll	130,085	120,091
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**12.68%**	**13.37%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	130,085	120,091
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Columbia County/2017
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Columbia County/2017

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Columbia County/2017

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Columbia County -- #2017

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Columbia County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Columbia County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Columbia County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.39%	13.50%	16.44%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.93%)	(3.93%)	(3.93%)	(3.93%)	(3.93%)
Side account rate relief [2]	(3.06%)	(3.06%)	(3.06%)	(3.06%)	(3.06%)
Net pension contribution rate	**12.24%**	**11.35%**	**14.29%**	**5.21%**	**9.31%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.80%**	**11.91%**	**14.85%**	**5.69%**	**9.79%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.11%	6.74%	14.35%	5.21%	7.92%
July 1, 2013 to June 30, 2015	10.09%	7.66%	14.94%	6.11%	8.84%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Columbia County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$9,062,695	$15,069,291
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,919,282)	(3,997,470)
Allocated pooled OPSRP UAL	623,873	161,288
Side account	3,052,758	2,888,691
Net unfunded pension actuarial accrued liability	2,714,528	8,344,418
Combined valuation payroll	8,851,421	9,452,859
Net pension UAL as a percentage of payroll	31%	88%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.93%)	(3.64%)
Side account rate relief	(3.06%)	(2.63%)
Allocated pooled RHIA UAL	$185,707	$244,881
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,140,733	$338,236	5.78%	$2,245,231	$129,774
Tier 2 General Service	10.58%	1,683,849	178,151	10.42%	1,760,915	183,487
Total General Service		**3,824,582**	**516,387**		**4,006,146**	**313,261**
Tier 1 Police & Fire	17.89%	558,271	99,875	15.06%	778,783	117,285
Tier 2 Police & Fire	15.70%	1,092,768	171,565	15.12%	1,233,534	186,510
Total Police & Fire		**1,651,039**	**271,440**		**2,012,317**	**303,795**
Total		**$5,475,621**	**$787,827**		**$6,018,463**	**$617,056**
Employer normal cost rate						
General Service			**13.50%**			**7.82%**
Police & Fire			**16.44%**			**15.10%**
Aggregate (Default)			**14.39%**			**10.25%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,997,470)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.07%)
B. Actual employer payroll	4,591,078
C. Payment to transition liability/(surplus)	(186,857)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.07%)
B. Actual employer payroll	4,463,088
C. Payment to transition liability/(surplus)	(181,648)
4. Supplemental payment to transition liability	0
5. Interest	(290,317)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($3,919,282)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,919,282)	(3,997,470)
2. Combined valuation payroll	8,851,421	9,452,859
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.93%)**	**(3.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$2,888,691**	**$2,888,691**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(241,479)	(241,479)
5. Side account earnings during 2012		406,546	406,546
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$3,052,758**	**$3,052,758**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$3,052,758	$2,888,691
Side Account 2	0	0
Side Account 3	0	0
Total	**$3,052,758**	**$2,888,691**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$3,052,758	$2,888,691
2. Combined valuation payroll	8,851,421	9,452,859
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(3.06%)	(2.63%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Columbia 911 Communications District/2671
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Columbia 911 Communications District/2671

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Columbia 911 Communications District/2671

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Columbia 911 Communications District -- #2671

December 2013

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Executive Summary

Milliman has prepared this report for Columbia 911 Communications District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Columbia 911 Communications District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Columbia 911 Communications District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.30%	12.30%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.89%)	(0.89%)	(0.89%)	(0.89%)	(0.89%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.49%**	**14.49%**	**18.91%**	**9.55%**	**13.65%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.05%**	**15.05%**	**19.47%**	**10.03%**	**14.13%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.71%	11.71%	19.04%	9.81%	12.52%
July 1, 2013 to June 30, 2015	12.21%	12.21%	18.64%	9.82%	12.55%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Columbia 911 Communications District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,176,870	$1,980,306
Allocated pre-SLGRP pooled liability/(surplus)	(227,756)	(253,482)
Transition liability/(surplus)	(114,744)	(116,050)
Allocated pooled OPSRP UAL	81,015	21,195
Side account	0	0
Net unfunded pension actuarial accrued liability	915,385	1,631,969
Combined valuation payroll	1,149,434	1,242,232
Net pension UAL as a percentage of payroll	80%	131%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.89%)	(0.80%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$24,116	$32,181
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$315,169	$49,797	5.78%	$404,064	$23,355
Tier 2 General Service	10.58%	639,974	67,709	10.42%	662,989	69,083
Total General Service		**955,143**	**117,506**		**1,067,053**	**92,438**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$955,143**	**$117,506**		**$1,067,053**	**$92,438**
Employer normal cost rate						
General Service			**12.30%**			**8.66%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.30%**			**8.66%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($116,050)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.80%)
B. Actual employer payroll	581,741
C. Payment to transition liability/(surplus)	(4,654)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.80%)
B. Actual employer payroll	644,065
C. Payment to transition liability/(surplus)	(5,152)
4. Supplemental payment to transition liability	0
5. Interest	(8,500)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($114,744)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(114,744)	(116,050)
2. Combined valuation payroll	1,149,434	1,242,232
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.89%)**	**(0.80%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,149,434	1,242,232
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Colton Fire Department/2649
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Colton Fire Department/2649

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Colton Fire Department/2649

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Colton Fire Department -- #2649

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Colton Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Colton Fire Department.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Colton Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(6.39%)	(6.39%)	(6.39%)	(6.39%)	(6.39%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.34%**	**11.79%**	**16.34%**	**5.81%**	**9.91%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.90%**	**12.35%**	**16.90%**	**6.29%**	**10.39%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.04%	6.38%	12.06%	2.41%	5.12%
July 1, 2013 to June 30, 2015	14.38%	7.24%	14.38%	5.59%	8.32%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Colton Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$86,395	$115,495
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(60,790)	(64,291)
Allocated pooled OPSRP UAL	5,947	1,236
Side account	0	0
Net unfunded pension actuarial accrued liability	31,552	52,440
Combined valuation payroll	84,381	72,449
Net pension UAL as a percentage of payroll	37%	72%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(6.39%)	(7.63%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,770	$1,877
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	84,381	15,096	15.06%	72,449	10,911
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**84,381**	**15,096**		**72,449**	**10,911**
Total		**$84,381**	**$15,096**		**$72,449**	**$10,911**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($64,291)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.90%)
B. Actual employer payroll	40,010
C. Payment to transition liability/(surplus)	(3,961)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.90%)
B. Actual employer payroll	40,835
C. Payment to transition liability/(surplus)	(4,043)
4. Supplemental payment to transition liability	0
5. Interest	(4,503)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($60,790)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(60,790)	(64,291)
2. Combined valuation payroll	84,381	72,449
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.39%)**	**(7.63%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	84,381	72,449
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Coburg Rural Fire Protection District/2801
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Coburg Rural Fire Protection District/2801

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Coburg Rural Fire Protection District/2801

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Coburg Rural Fire Protection District -- #2801

December 2013

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Executive Summary

Milliman has prepared this report for Coburg Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Coburg Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Coburg Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(6.87%)	(6.87%)	(6.87%)	(6.87%)	(6.87%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.67%**	**11.31%**	**13.67%**	**5.33%**	**9.43%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.23%**	**11.87%**	**14.23%**	**5.81%**	**9.91%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.04%	6.68%	14.04%	5.23%	7.94%
July 1, 2013 to June 30, 2015	14.62%	7.42%	14.62%	5.77%	8.50%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Coburg Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$117,204	$185,961
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(88,604)	(89,682)
Allocated pooled OPSRP UAL	8,068	1,990
Side account	0	0
Net unfunded pension actuarial accrued liability	36,668	98,269
Combined valuation payroll	114,472	116,652
Net pension UAL as a percentage of payroll	32%	84%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(6.87%)	(6.61%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,402	$3,022
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	68,741	10,792	15.12%	71,331	10,785
Total Police & Fire		**68,741**	**10,792**		**71,331**	**10,785**
Total		**$68,741**	**$10,792**		**$71,331**	**$10,785**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($89,682)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.08%)
B. Actual employer payroll	53,628
C. Payment to transition liability/(surplus)	(3,797)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.08%)
B. Actual employer payroll	54,298
C. Payment to transition liability/(surplus)	(3,844)
4. Supplemental payment to transition liability	0
5. Interest	(6,563)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($88,604)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(88,604)	(89,682)
2. Combined valuation payroll	114,472	116,652
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.87%)**	**(6.61%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	114,472	116,652
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Cloverdale Rural Fire Protection District/2681
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Cloverdale Rural Fire Protection District/2681

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Cloverdale Rural Fire Protection District/2681

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Cloverdale Rural Fire Protection District -- #2681

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Cloverdale Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Cloverdale Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Cloverdale Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	6.52%	6.52%	6.52%	6.52%	6.52%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**27.49%**	**22.94%**	**27.49%**	**16.96%**	**21.06%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**28.05%**	**23.50%**	**28.05%**	**17.44%**	**21.54%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	26.12%	17.92%	26.12%	16.47%	19.18%
July 1, 2013 to June 30, 2015	27.17%	20.03%	27.17%	18.38%	21.11%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Cloverdale Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$76,127	$114,288
Allocated pre-SLGRP pooled liability/(surplus)	(14,733)	(14,629)
Transition liability/(surplus)	54,666	57,475
Allocated pooled OPSRP UAL	5,241	1,223
Side account	0	0
Net unfunded pension actuarial accrued liability	121,301	158,357
Combined valuation payroll	74,352	71,692
Net pension UAL as a percentage of payroll	163%	221%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	6.52%	6.90%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,560	$1,857
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	74,352	13,302	15.06%	71,692	10,797
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**74,352**	**13,302**		**71,692**	**10,797**
Total		**$74,352**	**$13,302**		**$71,692**	**$10,797**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$57,475
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	5.86%
B. Actual employer payroll	56,609
C. Payment to transition liability/(surplus)	3,317
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	5.86%
B. Actual employer payroll	60,416
C. Payment to transition liability/(surplus)	3,541
4. Supplemental payment to transition liability	0
5. Interest	4,049
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$54,666**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	54,666	57,475
2. Combined valuation payroll	74,352	71,692
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**6.52%**	**6.90%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	74,352	71,692
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Clean Water Services/2617
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clean Water Services/2617

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clean Water Services/2617

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

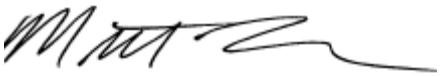
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

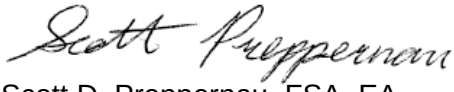
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clean Water Services -- #2617

December 2013

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Executive Summary

Milliman has prepared this report for Clean Water Services to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clean Water Services.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clean Water Services

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.99%	13.99%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.30%)	(1.30%)	(1.30%)	(1.30%)	(1.30%)
Side account rate relief [2]	(5.00%)	(5.00%)	(5.00%)	(5.00%)	(5.00%)
Net pension contribution rate	**12.53%**	**12.53%**	**15.26%**	**5.90%**	**10.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.09%**	**13.09%**	**15.82%**	**6.38%**	**10.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.06%	7.06%	15.47%	6.24%	8.95%
July 1, 2013 to June 30, 2015	7.42%	7.42%	15.20%	6.38%	9.11%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clean Water Services

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$24,939,490	$38,044,655
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,562,444)	(3,615,700)
Allocated pooled OPSRP UAL	1,716,825	407,196
Side account	13,724,305	13,027,896
Net unfunded pension actuarial accrued liability	9,369,566	21,808,255
Combined valuation payroll	24,358,087	23,865,141
Net pension UAL as a percentage of payroll	38%	91%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.30%)	(1.30%)
Side account rate relief	(5.00%)	(4.70%)
Allocated pooled RHIA UAL	$511,043	$618,238
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$10,258,930	$1,620,911	5.78%	$10,766,679	$622,314
Tier 2 General Service	10.58%	5,444,839	576,064	10.42%	5,298,381	552,091
Total General Service		**15,703,769**	**2,196,975**		**16,065,060**	**1,174,405**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$15,703,769**	**$2,196,975**		**$16,065,060**	**$1,174,405**
Employer normal cost rate						
General Service			**13.99%**			**7.31%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.99%**			**7.31%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,615,700)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.28%)
B. Actual employer payroll	11,496,256
C. Payment to transition liability/(surplus)	(147,152)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.28%)
B. Actual employer payroll	13,280,346
C. Payment to transition liability/(surplus)	(169,989)
4. Supplemental payment to transition liability	0
5. Interest	(263,885)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($3,562,444)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,562,444)	(3,615,700)
2. Combined valuation payroll	24,358,087	23,865,141
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.30%)**	**(1.30%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$13,027,896**	**$13,027,896**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,137,088)	(1,137,088)
5. Side account earnings during 2012		1,834,498	1,834,498
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$13,724,305**	**$13,724,305**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$13,724,305	$13,027,896
Side Account 2	0	0
Side Account 3	0	0
Total	**$13,724,305**	**$13,027,896**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$13,724,305	$13,027,896
2. Combined valuation payroll	24,358,087	23,865,141
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(5.00%)	(4.70%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Clatsop County/2036
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clatsop County/2036

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clatsop County/2036

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clatsop County -- #2036

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Clatsop County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clatsop County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clatsop County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.65%	13.62%	16.62%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(5.22%)	(5.22%)	(5.22%)	(5.22%)	(5.22%)
Net pension contribution rate	**12.51%**	**11.48%**	**14.48%**	**5.22%**	**9.32%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.07%**	**12.04%**	**15.04%**	**5.70%**	**9.80%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.32%	6.72%	14.79%	5.50%	8.21%
July 1, 2013 to June 30, 2015	9.47%	7.03%	14.50%	5.68%	8.41%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clatsop County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$12,603,427	$18,999,747
Allocated pre-SLGRP pooled liability/(surplus)	(2,439,104)	(2,431,996)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	867,615	203,356
Side account	7,247,445	6,890,779
Net unfunded pension actuarial accrued liability	3,784,493	9,880,328
Combined valuation payroll	12,309,609	11,918,406
Net pension UAL as a percentage of payroll	31%	83%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	(5.22%)	(4.97%)
Allocated pooled RHIA UAL	$258,261	$308,752
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,531,346	$399,953	5.78%	$2,782,463	$160,826
Tier 2 General Service	10.58%	1,814,180	191,940	10.42%	1,820,630	189,710
Total General Service		**4,345,526**	**591,893**		**4,603,093**	**350,536**
Tier 1 Police & Fire	17.89%	950,731	170,086	15.06%	999,875	150,581
Tier 2 Police & Fire	15.70%	1,305,277	204,928	15.12%	1,235,340	186,783
Total Police & Fire		**2,256,008**	**375,014**		**2,235,215**	**337,364**
Total		**$6,601,534**	**$966,907**		**$6,838,308**	**$687,900**
Employer normal cost rate						
General Service			**13.62%**			**7.62%**
Police & Fire			**16.62%**			**15.09%**
Aggregate (Default)			**14.65%**			**10.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	12,309,609	11,918,406
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$6,890,779**	**$6,890,779**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(612,140)	(612,140)
5. Side account earnings during 2012		969,806	969,806
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$7,247,445**	**$7,247,445**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$7,247,445	$6,890,779
Side Account 2	0	0
Side Account 3	0	0
Total	**$7,247,445**	**$6,890,779**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$7,247,445	$6,890,779
2. Combined valuation payroll	12,309,609	11,918,406
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(5.22%)	(4.97%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Clatsop County 4-H District/2704
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clatsop County 4-H District/2704

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clatsop County 4-H District/2704

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clatsop County 4-H District -- #2704

December 2013

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Executive Summary

Milliman has prepared this report for Clatsop County 4-H District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clatsop County 4-H District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clatsop County 4-H District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.06%)	(0.06%)	(0.06%)	(0.06%)	(0.06%)
Side account rate relief [2]	(1.54%)	(1.54%)	(1.54%)	(1.54%)	(1.54%)
Net pension contribution rate	**17.28%**	**17.28%**	**18.20%**	**8.84%**	**12.94%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.84%**	**17.84%**	**18.76%**	**9.32%**	**13.42%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.24%	6.24%	15.80%	6.57%	9.28%
July 1, 2013 to June 30, 2015	8.29%	8.29%	17.60%	8.78%	11.51%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clatsop County 4-H District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$214,446	$284,822
Allocated pre-SLGRP pooled liability/(surplus)	(41,501)	(36,458)
Transition liability/(surplus)	(1,355)	(1,533)
Allocated pooled OPSRP UAL	14,762	3,048
Side account	36,439	39,993
Net unfunded pension actuarial accrued liability	149,913	209,886
Combined valuation payroll	209,447	178,667
Net pension UAL as a percentage of payroll	72%	117%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.06%)	(0.07%)
Side account rate relief	(1.54%)	(1.93%)
Allocated pooled RHIA UAL	$4,394	$4,628
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$32,942	$5,205	5.78%	$26,896	$1,555
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**32,942**	**5,205**		**26,896**	**1,555**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$32,942**	**$5,205**		**$26,896**	**$1,555**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,533)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.13%)
B. Actual employer payroll	107,844
C. Payment to transition liability/(surplus)	(140)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.13%)
B. Actual employer payroll	106,443
C. Payment to transition liability/(surplus)	(138)
4. Supplemental payment to transition liability	0
5. Interest	(100)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($1,355)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,355)	(1,533)
2. Combined valuation payroll	209,447	178,667
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.06%)**	**(0.07%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$39,993**	**$39,993**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(7,899)	(7,899)
5. Side account earnings during 2012		5,345	5,345
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$36,439**	**$36,439**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$36,439	$39,993
Side Account 2	0	0
Side Account 3	0	0
Total	**$36,439**	**$39,993**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$36,439	$39,993
2. Combined valuation payroll	209,447	178,667
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(1.54%)	(1.93%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Clatsop Community College/2900
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clatsop Community College/2900

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clatsop Community College/2900

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clatsop Community College -- #2900

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Clatsop Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clatsop Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clatsop Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(10.06%)	(10.06%)	(10.06%)	(10.06%)	(10.06%)
Net pension contribution rate	**9.78%**	**9.78%**	**13.35%**	**3.99%**	**8.09%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.34%**	**10.34%**	**13.91%**	**4.47%**	**8.57%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.71%	7.71%	15.37%	6.14%	8.85%
July 1, 2013 to June 30, 2015	7.78%	7.78%	14.80%	5.98%	8.71%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clatsop Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,461,992	$9,438,676
Allocated pre-SLGRP pooled liability/(surplus)	1,112,225	1,282,801
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	376,001	101,023
Side account	6,049,287	5,686,073
Net unfunded pension actuarial accrued liability	900,931	5,136,427
Combined valuation payroll	5,334,659	5,920,814
Net pension UAL as a percentage of payroll	17%	87%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(10.06%)	(8.26%)
Allocated pooled RHIA UAL	$111,923	$153,382
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$5,686,073**	**$5,686,073**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(444,601)	(444,601)
5. Side account earnings during 2012		808,816	808,816
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$6,049,287**	**$6,049,287**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$6,049,287	$5,686,073
Side Account 2	0	0
Side Account 3	0	0
Total	**$6,049,287**	**$5,686,073**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$6,049,287	$5,686,073
2. Combined valuation payroll	5,334,659	5,920,814
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(10.06%)	(8.26%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Clatskanie Rural Fire Protection District/2588
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clatskanie Rural Fire Protection District/2588

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clatskanie Rural Fire Protection District/2588

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clatskanie Rural Fire Protection District -- #2588

December 2013

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Executive Summary

Milliman has prepared this report for Clatskanie Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clatskanie Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clatskanie Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.24%	13.34%	17.24%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.33%)	(9.33%)	(9.33%)	(9.33%)	(9.33%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.75%**	**8.85%**	**12.75%**	**2.87%**	**6.97%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.31%**	**9.41%**	**13.31%**	**3.35%**	**7.45%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.28%	4.34%	12.28%	2.89%	5.60%
July 1, 2013 to June 30, 2015	12.71%	5.55%	12.71%	3.90%	6.63%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clatskanie Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$513,023	$805,581
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(526,717)	(532,509)
Allocated pooled OPSRP UAL	35,316	8,622
Side account	0	0
Net unfunded pension actuarial accrued liability	21,622	281,694
Combined valuation payroll	501,063	505,335
Net pension UAL as a percentage of payroll	4%	56%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.33%)	(9.06%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,513	$13,091
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	175,705	31,434	15.06%	176,077	26,517
Tier 2 Police & Fire	15.70%	74,875	11,755	15.12%	80,629	12,191
Total Police & Fire		**250,580**	**43,189**		**256,706**	**38,708**
Total		**$250,580**	**$43,189**		**$256,706**	**$38,708**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.24%**			**15.08%**
Aggregate (Default)			**17.24%**			**15.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($532,509)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.42%)
B. Actual employer payroll	239,957
C. Payment to transition liability/(surplus)	(22,604)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.42%)
B. Actual employer payroll	235,713
C. Payment to transition liability/(surplus)	(22,204)
4. Supplemental payment to transition liability	0
5. Interest	(39,016)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($526,717)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(526,717)	(532,509)
2. Combined valuation payroll	501,063	505,335
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.33%)**	**(9.06%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	501,063	505,335
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Clatskanie PUD/2526
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clatskanie PUD/2526

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clatskanie PUD/2526

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clatskanie PUD -- #2526

December 2013

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Executive Summary

Milliman has prepared this report for Clatskanie PUD to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clatskanie PUD.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clatskanie PUD

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.19%	13.19%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	4.88%	4.88%	4.88%	4.88%	4.88%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.15%**	**21.15%**	**24.68%**	**15.32%**	**19.42%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.71%**	**21.71%**	**25.24%**	**15.80%**	**19.90%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.31%	17.31%	25.26%	16.03%	18.74%
July 1, 2013 to June 30, 2015	17.63%	17.63%	24.54%	15.72%	18.45%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clatskanie PUD

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,627,098	$5,360,568
Allocated pre-SLGRP pooled liability/(surplus)	(701,941)	(686,161)
Transition liability/(surplus)	1,949,279	1,995,079
Allocated pooled OPSRP UAL	249,688	57,375
Side account	0	0
Net unfunded pension actuarial accrued liability	5,124,124	6,726,861
Combined valuation payroll	3,542,541	3,362,646
Net pension UAL as a percentage of payroll	145%	200%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	4.88%	5.10%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$74,324	$87,111
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$693,592	$109,588	5.78%	$714,128	$41,277
Tier 2 General Service	10.58%	691,618	73,173	10.42%	765,600	79,776
Total General Service		**1,385,210**	**182,761**		**1,479,728**	**121,053**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$1,385,210**	**$182,761**		**$1,479,728**	**$121,053**
Employer normal cost rate						
General Service			**13.19%**			**8.18%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.19%**			**8.18%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$1,995,079
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	5.42%
B. Actual employer payroll	1,772,889
C. Payment to transition liability/(surplus)	96,091
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	5.42%
B. Actual employer payroll	1,736,172
C. Payment to transition liability/(surplus)	94,100
4. Supplemental payment to transition liability	0
5. Interest	144,391
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$1,949,279**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	1,949,279	1,995,079
2. Combined valuation payroll	3,542,541	3,362,646
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**4.88%**	**5.10%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,542,541	3,362,646
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Clatskanie Library/2707
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clatskanie Library/2707

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clatskanie Library/2707

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clatskanie Library -- #2707

December 2013

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Executive Summary

Milliman has prepared this report for Clatskanie Library to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clatskanie Library.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clatskanie Library

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.44%	14.44%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.53%	0.53%	0.53%	0.53%	0.53%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.05%**	**18.05%**	**20.33%**	**10.97%**	**15.07%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.61%**	**18.61%**	**20.89%**	**11.45%**	**15.55%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.82%	11.82%	20.33%	11.10%	13.81%
July 1, 2013 to June 30, 2015	11.91%	11.91%	20.02%	11.20%	13.93%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

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	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$71,910	$102,219
Allocated pre-SLGRP pooled liability/(surplus)	(13,917)	(13,084)
Transition liability/(surplus)	4,209	4,240
Allocated pooled OPSRP UAL	4,950	1,094
Side account	0	0
Net unfunded pension actuarial accrued liability	67,152	94,469
Combined valuation payroll	70,234	64,121
Net pension UAL as a percentage of payroll	96%	147%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.53%	0.57%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,474	$1,661
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$48,634	$7,684	5.78%	$47,489	$2,745
Tier 2 General Service	10.58%	17,217	1,822	10.42%	16,632	1,733
Total General Service		**65,851**	**9,506**		**64,121**	**4,478**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$65,851**	**$9,506**		**$64,121**	**$4,478**
Employer normal cost rate						
General Service			**14.44%**			**6.98%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.44%**			**6.98%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$4,240
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.49%
B. Actual employer payroll	34,757
C. Payment to transition liability/(surplus)	170
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.49%
B. Actual employer payroll	35,235
C. Payment to transition liability/(surplus)	173
4. Supplemental payment to transition liability	0
5. Interest	312
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$4,209**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	4,209	4,240
2. Combined valuation payroll	70,234	64,121
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.53%**	**0.57%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	70,234	64,121
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Clackamas Vector Control/2538
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Clackamas Vector Control/2538

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clackamas Vector Control/2538

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clackamas Vector Control -- #2538

December 2013

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Executive Summary

Milliman has prepared this report for Clackamas Vector Control to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clackamas Vector Control.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clackamas Vector Control

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	3.94%	3.94%	3.94%	3.94%	3.94%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**22.82%**	**22.82%**	**23.74%**	**14.38%**	**18.48%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**23.38%**	**23.38%**	**24.30%**	**14.86%**	**18.96%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.74%	16.74%	26.30%	17.07%	19.78%
July 1, 2013 to June 30, 2015	16.73%	16.73%	26.04%	17.22%	19.95%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clackamas Vector Control

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$295,977	$282,632
Allocated pre-SLGRP pooled liability/(surplus)	(57,280)	(36,177)
Transition liability/(surplus)	128,402	132,674
Allocated pooled OPSRP UAL	20,375	3,025
Side account	0	0
Net unfunded pension actuarial accrued liability	387,474	382,154
Combined valuation payroll	289,077	177,293
Net pension UAL as a percentage of payroll	134%	216%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	3.94%	6.44%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,065	$4,593
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$99,161	$15,667	5.78%	$78,157	$4,517
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**99,161**	**15,667**		**78,157**	**4,517**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$99,161**	**$15,667**		**$78,157**	**$4,517**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$132,674
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	6.46%
B. Actual employer payroll	109,478
C. Payment to transition liability/(surplus)	7,072
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	6.46%
B. Actual employer payroll	103,872
C. Payment to transition liability/(surplus)	6,711
4. Supplemental payment to transition liability	0
5. Interest	9,511
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$128,402**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	128,402	132,674
2. Combined valuation payroll	289,077	177,293
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**3.94%**	**6.44%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	289,077	177,293
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Clackamas River Water/2761
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clackamas River Water/2761

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clackamas River Water/2761

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clackamas River Water -- #2761

December 2013

Secondary Employers

2634 Clairmont Water

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Executive Summary

Milliman has prepared this report for Clackamas River Water to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clackamas River Water.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clackamas River Water

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.41%	12.41%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	2.63%	2.63%	2.63%	2.63%	2.63%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.12%**	**18.12%**	**22.43%**	**13.07%**	**17.17%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.68%**	**18.68%**	**22.99%**	**13.55%**	**17.65%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.80%	15.80%	22.65%	13.42%	16.13%
July 1, 2013 to June 30, 2015	15.78%	15.78%	22.09%	13.27%	16.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clackamas River Water

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,878,523	$4,372,307
Allocated pre-SLGRP pooled liability/(surplus)	(557,072)	(559,662)
Transition liability/(surplus)	834,573	846,127
Allocated pooled OPSRP UAL	198,156	46,797
Side account	0	0
Net unfunded pension actuarial accrued liability	3,354,180	4,705,569
Combined valuation payroll	2,811,417	2,742,717
Net pension UAL as a percentage of payroll	119%	172%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	2.63%	2.65%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$58,985	$71,051
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$656,455	$103,720	5.78%	$658,682	$38,072
Tier 2 General Service	10.58%	1,215,328	128,582	10.42%	1,206,635	125,731
Total General Service		**1,871,783**	**232,302**		**1,865,317**	**163,803**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$1,871,783**	**$232,302**		**$1,865,317**	**$163,803**
Employer normal cost rate						
General Service			**12.41%**			**8.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.41%**			**8.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$846,127
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.81%
B. Actual employer payroll	1,302,459
C. Payment to transition liability/(surplus)	36,599
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.81%
B. Actual employer payroll	1,308,714
C. Payment to transition liability/(surplus)	36,775
4. Supplemental payment to transition liability	0
5. Interest	61,820
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$834,573**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	834,573	846,127
2. Combined valuation payroll	2,811,417	2,742,717
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.63%**	**2.65%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,811,417	2,742,717
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Clackamas County Fire District/2745
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Clackamas County Fire District/2745

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clackamas County Fire District/2745

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clackamas County Fire District -- #2745

December 2013

Secondary Employers

2164	Milwaukie Central Dispatch
2517	Clackamas Fire District #1
2523	Oak Lodge Fire Department
2537	Clackamas Fire Protection District #71
2546	Happy Valley Fire District
2548	Multnomah Rural Fire Protection District #12
2574	Clackamas County Rural Fire Protection District #54
2583	Beavercreek Fire District
2591	Clackamas County Rural Fire Protection District #68

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Executive Summary

Milliman has prepared this report for Clackamas County Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clackamas County Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clackamas County Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.65%	11.77%	17.11%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(4.18%)	(4.18%)	(4.18%)	(4.18%)	(4.18%)
Net pension contribution rate	**17.31%**	**12.43%**	**17.77%**	**8.02%**	**12.12%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.87%**	**12.99%**	**18.33%**	**8.50%**	**12.60%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.96%	10.62%	17.50%	8.09%	10.80%
July 1, 2013 to June 30, 2015	17.23%	11.62%	17.75%	8.94%	11.67%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clackamas County Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$21,270,067	$31,846,383
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	1,464,223	340,855
Side account	9,797,242	9,335,771
Net unfunded pension actuarial accrued liability	12,937,048	22,851,467
Combined valuation payroll	20,774,208	19,977,009
Net pension UAL as a percentage of payroll	62%	114%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.00%	0.00%
Side account rate relief	(4.18%)	(4.02%)
Allocated pooled RHIA UAL	$435,852	$517,514
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$276,356	$43,664	5.78%	$392,568	$22,690
Tier 2 General Service	10.58%	934,915	98,914	10.42%	848,103	88,372
Total General Service		**1,211,271**	**142,578**		**1,240,671**	**111,062**
Tier 1 Police & Fire	17.89%	8,284,114	1,482,028	15.06%	8,801,910	1,325,568
Tier 2 Police & Fire	15.70%	4,578,935	718,893	15.12%	4,438,740	671,137
Total Police & Fire		**12,863,049**	**2,200,921**		**13,240,650**	**1,996,705**
Total		**$14,074,320**	**$2,343,499**		**$14,481,321**	**$2,107,767**
Employer normal cost rate						
General Service			**11.77%**			**8.95%**
Police & Fire			**17.11%**			**15.08%**
Aggregate (Default)			**16.65%**			**14.56%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	20,774,208	19,977,009
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$9,335,771**	**$9,335,771**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(849,928)	(849,928)
5. Side account earnings during 2012		1,312,399	1,312,399
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$9,797,242**	**$9,797,242**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$9,797,242	$9,335,771
Side Account 2	0	0
Side Account 3	0	0
Total	**$9,797,242**	**$9,335,771**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$9,797,242	$9,335,771
2. Combined valuation payroll	20,774,208	19,977,009
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(4.18%)	(4.02%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Clackamas Community College/2908
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Clackamas Community College/2908

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Clackamas Community College/2908

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Clackamas Community College -- #2908

December 2013

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Executive Summary

Milliman has prepared this report for Clackamas Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Clackamas Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Clackamas Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(8.33%)	(8.33%)	(8.33%)	(8.33%)	(8.33%)
Net pension contribution rate	**11.51%**	**11.51%**	**15.08%**	**5.72%**	**9.82%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.07%**	**12.07%**	**15.64%**	**6.20%**	**10.30%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.42%	8.42%	16.08%	6.85%	9.56%
July 1, 2013 to June 30, 2015	8.65%	8.65%	15.67%	6.85%	9.58%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Clackamas Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$26,855,629	$43,647,349
Allocated pre-SLGRP pooled liability/(surplus)	5,468,611	5,932,068
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	1,848,731	467,162
Side account	24,645,203	23,510,478
Net unfunded pension actuarial accrued liability	9,527,768	26,536,101
Combined valuation payroll	26,229,556	27,379,671
Net pension UAL as a percentage of payroll	36%	97%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(8.33%)	(7.39%)
Allocated pooled RHIA UAL	$550,307	$709,284
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$23,510,478**	**$23,510,478**
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(2,172,694)	(2,172,694)
5. Side account earnings during 2012		3,309,420	3,309,420
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$24,645,203**	**$24,645,203**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$13,015,413	$12,412,634
Side Account 2	11,629,790	11,097,844
Side Account 3	0	0
Total	**$24,645,203**	**$23,510,478**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$24,645,203	$23,510,478
2. Combined valuation payroll	26,229,556	27,379,671
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(8.33%)	(7.39%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Yoncalla/2307
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Yoncalla/2307

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
City of Yoncalla/2307

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Yoncalla -- #2307

December 2013

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Executive Summary

Milliman has prepared this report for City of Yoncalla to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Yoncalla.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Yoncalla

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.45%)	(0.45%)	(0.45%)	(0.45%)	(0.45%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.21%**	**13.21%**	**19.35%**	**9.99%**	**14.09%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.77%**	**13.77%**	**19.91%**	**10.47%**	**14.57%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.04%	14.04%	19.51%	10.28%	12.99%
July 1, 2013 to June 30, 2015	14.40%	14.40%	19.07%	10.25%	12.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Yoncalla

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$138,432	$251,261
Allocated pre-SLGRP pooled liability/(surplus)	(26,790)	(32,162)
Transition liability/(surplus)	(6,800)	(6,766)
Allocated pooled OPSRP UAL	9,530	2,689
Side account	0	0
Net unfunded pension actuarial accrued liability	114,372	215,022
Combined valuation payroll	135,205	157,614
Net pension UAL as a percentage of payroll	85%	136%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.45%)	(0.37%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,837	$4,083
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	69,425	7,345	10.42%	124,363	12,959
Total General Service		**69,425**	**7,345**		**124,363**	**12,959**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$69,425**	**$7,345**		**$124,363**	**$12,959**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($6,766)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.33%)
B. Actual employer payroll	69,128
C. Payment to transition liability/(surplus)	(228)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.33%)
B. Actual employer payroll	73,126
C. Payment to transition liability/(surplus)	(242)
4. Supplemental payment to transition liability	0
5. Interest	(504)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($6,800)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(6,800)	(6,766)
2. Combined valuation payroll	135,205	157,614
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.45%)**	**(0.37%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	135,205	157,614
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Yamhill/2214
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Yamhill/2214

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Yamhill/2214

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Yamhill -- #2214

December 2013

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Executive Summary

Milliman has prepared this report for City of Yamhill to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Yamhill.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Yamhill

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.34%	12.08%	16.58%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.81%)	(5.81%)	(5.81%)	(5.81%)	(5.81%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.37%**	**11.11%**	**15.61%**	**6.39%**	**10.49%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.93%**	**11.67%**	**16.17%**	**6.87%**	**10.97%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.12%	7.70%	14.03%	4.86%	7.57%
July 1, 2013 to June 30, 2015	11.97%	8.90%	14.96%	6.13%	8.86%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Yamhill

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$402,478	$546,875
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(257,374)	(266,001)
Allocated pooled OPSRP UAL	27,706	5,853
Side account	0	0
Net unfunded pension actuarial accrued liability	172,810	286,727
Combined valuation payroll	393,095	343,051
Net pension UAL as a percentage of payroll	44%	84%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.81%)	(6.67%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,247	$8,887
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$40,735	$6,436	5.78%	$39,977	$2,311
Tier 2 General Service	10.58%	100,885	10,674	10.42%	94,585	9,856
Total General Service		**141,620**	**17,110**		**134,562**	**12,167**
Tier 1 Police & Fire	17.89%	57,413	10,271	15.06%	56,764	8,549
Tier 2 Police & Fire	15.70%	84,832	13,319	15.12%	81,579	12,335
Total Police & Fire		**142,245**	**23,590**		**138,343**	**20,884**
Total		**$283,865**	**$40,700**		**$272,905**	**$33,051**
Employer normal cost rate						
General Service			**12.08%**			**9.04%**
Police & Fire			**16.58%**			**15.10%**
Aggregate (Default)			**14.34%**			**12.11%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($266,001)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.45%)
B. Actual employer payroll	179,992
C. Payment to transition liability/(surplus)	(13,409)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.45%)
B. Actual employer payroll	191,722
C. Payment to transition liability/(surplus)	(14,283)
4. Supplemental payment to transition liability	0
5. Interest	(19,065)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($257,374)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(257,374)	(266,001)
2. Combined valuation payroll	393,095	343,051
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.81%)**	**(6.67%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	393,095	343,051
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Yachats/2300
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Yachats/2300

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Yachats/2300

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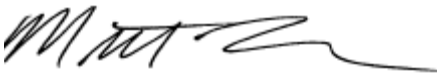
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The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

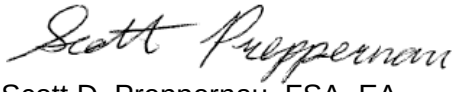
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Yachats -- #2300

December 2013

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Executive Summary

Milliman has prepared this report for City of Yachats to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Yachats.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Yachats

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.77%	12.77%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.07%)	(5.07%)	(5.07%)	(5.07%)	(5.07%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.54%**	**12.54%**	**16.49%**	**7.13%**	**11.23%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.10%**	**13.10%**	**17.05%**	**7.61%**	**11.71%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.96%	8.96%	16.09%	6.86%	9.57%
July 1, 2013 to June 30, 2015	9.05%	9.05%	15.71%	6.89%	9.62%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Yachats

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$554,224	$785,678
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(309,358)	(314,473)
Allocated pooled OPSRP UAL	38,153	8,409
Side account	0	0
Net unfunded pension actuarial accrued liability	283,019	479,614
Combined valuation payroll	541,304	492,850
Net pension UAL as a percentage of payroll	52%	97%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.07%)	(5.49%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$11,357	$12,768
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$132,555	$20,944	5.78%	$134,434	$7,770
Tier 2 General Service	10.58%	183,099	19,372	10.42%	179,519	18,706
Total General Service		**315,654**	**40,316**		**313,953**	**26,476**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$315,654**	**$40,316**		**$313,953**	**$26,476**
Employer normal cost rate						
General Service			**12.77%**			**8.43%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.77%**			**8.43%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($314,473)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.45%)
B. Actual employer payroll	250,663
C. Payment to transition liability/(surplus)	(13,661)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.45%)
B. Actual employer payroll	263,649
C. Payment to transition liability/(surplus)	(14,369)
4. Supplemental payment to transition liability	0
5. Interest	(22,915)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($309,358)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(309,358)	(314,473)
2. Combined valuation payroll	541,304	492,850
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.07%)**	**(5.49%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	541,304	492,850
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Woodburn/2303
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Woodburn/2303

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Woodburn/2303

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Woodburn -- #2303

December 2013

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Executive Summary

Milliman has prepared this report for City of Woodburn to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Woodburn.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Woodburn

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.38%	13.22%	16.58%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.87%)	(1.87%)	(1.87%)	(1.87%)	(1.87%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.59%**	**14.43%**	**17.79%**	**8.57%**	**12.67%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.15%**	**14.99%**	**18.35%**	**9.05%**	**13.15%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.64%	10.51%	18.08%	8.85%	11.56%
July 1, 2013 to June 30, 2015	12.83%	10.59%	17.72%	8.89%	11.62%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Woodburn

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$8,478,608	$13,983,062
Allocated pre-SLGRP pooled liability/(surplus)	(1,640,840)	(1,789,853)
Transition liability/(surplus)	(1,743,319)	(1,763,738)
Allocated pooled OPSRP UAL	583,664	149,662
Side account	0	0
Net unfunded pension actuarial accrued liability	5,678,113	10,579,133
Combined valuation payroll	8,280,950	8,771,475
Net pension UAL as a percentage of payroll	69%	121%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.87%)	(1.73%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$173,738	$227,229
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,654,672	$261,438	5.78%	$1,909,610	$110,375
Tier 2 General Service	10.58%	1,617,373	171,118	10.42%	1,701,835	177,331
Total General Service		**3,272,045**	**432,556**		**3,611,445**	**287,706**
Tier 1 Police & Fire	17.89%	691,462	123,703	15.06%	687,837	103,588
Tier 2 Police & Fire	15.70%	1,028,336	161,449	15.12%	969,803	146,634
Total Police & Fire		**1,719,798**	**285,152**		**1,657,640**	**250,222**
Total		**$4,991,843**	**$717,708**		**$5,269,085**	**$537,928**
Employer normal cost rate						
General Service			**13.22%**			**7.97%**
Police & Fire			**16.58%**			**15.10%**
Aggregate (Default)			**14.38%**			**10.21%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,763,738)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.76%)
B. Actual employer payroll	4,313,233
C. Payment to transition liability/(surplus)	(75,913)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.76%)
B. Actual employer payroll	4,184,161
C. Payment to transition liability/(surplus)	(73,641)
4. Supplemental payment to transition liability	0
5. Interest	(129,135)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,743,319)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,743,319)	(1,763,738)
2. Combined valuation payroll	8,280,950	8,771,475
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.87%)**	**(1.73%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	8,280,950	8,771,475
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Wood Village/2185
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Wood Village/2185

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Wood Village/2185

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

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Principal and Consulting Actuary

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Consulting Actuary

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Wood Village -- #2185

December 2013

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Executive Summary

Milliman has prepared this report for City of Wood Village to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Wood Village.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Wood Village

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.83%	12.83%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.37%	4.37%	4.37%	4.37%	4.37%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.72%)	(1.72%)	(1.72%)	(1.72%)	(1.72%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.32%**	**14.32%**	**18.21%**	**8.85%**	**12.95%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.88%**	**14.88%**	**18.77%**	**9.33%**	**13.43%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.27%	10.27%	18.60%	9.37%	12.08%
July 1, 2013 to June 30, 2015	9.97%	9.97%	17.93%	9.11%	11.84%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Wood Village

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$853,225	$1,313,658
Allocated pre-SLGRP pooled liability/(surplus)	(165,122)	(168,150)
Transition liability/(surplus)	(161,248)	(160,363)
Allocated pooled OPSRP UAL	58,736	14,060
Side account	0	0
Net unfunded pension actuarial accrued liability	585,591	999,205
Combined valuation payroll	833,334	824,048
Net pension UAL as a percentage of payroll	70%	121%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.72%)	(1.67%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$17,484	$21,347
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$197,284	$31,171	5.78%	$338,603	$19,571
Tier 2 General Service	10.58%	260,245	27,534	10.42%	139,185	14,503
Total General Service		**457,529**	**58,705**		**477,788**	**34,074**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$457,529**	**$58,705**		**$477,788**	**$34,074**
Employer normal cost rate						
General Service			**12.83%**			**7.13%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.83%**			**7.13%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($160,363)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.36%)
B. Actual employer payroll	408,093
C. Payment to transition liability/(surplus)	(5,550)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.36%)
B. Actual employer payroll	405,006
C. Payment to transition liability/(surplus)	(5,509)
4. Supplemental payment to transition liability	0
5. Interest	(11,944)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($161,248)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(161,248)	(160,363)
2. Combined valuation payroll	833,334	824,048
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.72%)**	**(1.67%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	833,334	824,048
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Winston/2280
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Winston/2280

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Winston/2280

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Winston -- #2280

December 2013

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Executive Summary

Milliman has prepared this report for City of Winston to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Winston.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Winston

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.42%	13.50%	16.80%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(8.49%)	(8.49%)	(8.49%)	(8.49%)	(8.49%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.01%**	**8.09%**	**11.39%**	**1.95%**	**6.05%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.57%**	**8.65%**	**11.95%**	**2.43%**	**6.53%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.95%	3.68%	11.03%	1.80%	4.51%
July 1, 2013 to June 30, 2015	7.69%	4.08%	10.81%	1.99%	4.72%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Winston

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,287,057	$1,941,326
Allocated pre-SLGRP pooled liability/(surplus)	(249,080)	(248,493)
Transition liability/(surplus)	(1,202,445)	(1,221,418)
Allocated pooled OPSRP UAL	88,600	20,778
Side account	0	0
Net unfunded pension actuarial accrued liability	(75,868)	492,193
Combined valuation payroll	1,257,052	1,217,780
Net pension UAL as a percentage of payroll	(6%)	40%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(8.49%)	(8.63%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$26,373	$31,547
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$121,770	$19,240	5.78%	$116,515	$6,735
Tier 2 General Service	10.58%	96,232	10,181	10.42%	146,506	15,266
Total General Service		**218,002**	**29,421**		**263,021**	**22,001**
Tier 1 Police & Fire	17.89%	152,757	27,328	15.06%	152,148	22,913
Tier 2 Police & Fire	15.70%	151,052	23,715	15.12%	151,120	22,849
Total Police & Fire		**303,809**	**51,043**		**303,268**	**45,762**
Total		**$521,811**	**$80,464**		**$566,289**	**$67,763**
Employer normal cost rate						
General Service			**13.50%**			**8.36%**
Police & Fire			**16.80%**			**15.09%**
Aggregate (Default)			**15.42%**			**11.97%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,221,418)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.81%)
B. Actual employer payroll	612,360
C. Payment to transition liability/(surplus)	(53,949)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.81%)
B. Actual employer payroll	614,015
C. Payment to transition liability/(surplus)	(54,094)
4. Supplemental payment to transition liability	0
5. Interest	(89,070)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,202,445)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,202,445)	(1,221,418)
2. Combined valuation payroll	1,257,052	1,217,780
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.49%)**	**(8.63%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,257,052	1,217,780
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Wilsonville/2240
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Wilsonville/2240

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Wilsonville/2240

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Wilsonville -- #2240

December 2013

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Executive Summary

Milliman has prepared this report for City of Wilsonville to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Wilsonville.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Wilsonville

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.41%	13.41%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.57%)	(0.57%)	(0.57%)	(0.57%)	(0.57%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.92%**	**15.92%**	**19.23%**	**9.87%**	**13.97%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.48%**	**16.48%**	**19.79%**	**10.35%**	**14.45%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.44%	11.44%	19.28%	10.05%	12.76%
July 1, 2013 to June 30, 2015	11.65%	11.65%	18.89%	10.07%	12.80%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Wilsonville

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$8,345,717	$13,190,413
Allocated pre-SLGRP pooled liability/(surplus)	(1,615,122)	(1,688,392)
Transition liability/(surplus)	(522,799)	(531,908)
Allocated pooled OPSRP UAL	574,516	141,178
Side account	0	0
Net unfunded pension actuarial accrued liability	6,782,312	11,111,291
Combined valuation payroll	8,151,157	8,274,252
Net pension UAL as a percentage of payroll	83%	134%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.57%)	(0.55%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$171,015	$214,349
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,769,946	$437,651	5.78%	$2,895,717	$167,372
Tier 2 General Service	10.58%	2,338,420	247,405	10.42%	2,322,446	241,999
Total General Service		**5,108,366**	**685,056**		**5,218,163**	**409,371**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$5,108,366**	**$685,056**		**$5,218,163**	**$409,371**
Employer normal cost rate						
General Service			**13.41%**			**7.85%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.41%**			**7.85%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($531,908)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.56%)
B. Actual employer payroll	4,201,841
C. Payment to transition liability/(surplus)	(23,530)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.56%)
B. Actual employer payroll	4,340,230
C. Payment to transition liability/(surplus)	(24,305)
4. Supplemental payment to transition liability	0
5. Interest	(38,726)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($522,799)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(522,799)	(531,908)
2. Combined valuation payroll	8,151,157	8,274,252
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.57%)**	**(0.55%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	8,151,157	8,274,252
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Wheeler/2147
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Wheeler/2147

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Wheeler/2147

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Wheeler -- #2147

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Wheeler to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Wheeler.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Wheeler

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.87%**	**17.28%**	**20.66%**	**11.30%**	**15.40%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.43%**	**17.84%**	**21.22%**	**11.78%**	**15.88%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.47%	4.47%	14.03%	4.80%	7.51%
July 1, 2013 to June 30, 2015	10.91%	9.68%	16.85%	8.03%	10.76%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Wheeler

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$129,382	$66,776
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(12,877)	(21,168)
Allocated pooled OPSRP UAL	8,907	715
Side account	0	0
Net unfunded pension actuarial accrued liability	125,412	46,323
Combined valuation payroll	126,366	41,888
Net pension UAL as a percentage of payroll	99%	111%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(0.90%)	(4.35%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,651	$1,085
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($21,168)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.51%)
B. Actual employer payroll	61,201
C. Payment to transition liability/(surplus)	(4,596)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.51%)
B. Actual employer payroll	61,905
C. Payment to transition liability/(surplus)	(4,649)
4. Supplemental payment to transition liability	0
5. Interest	(954)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($12,877)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(12,877)	(21,168)
2. Combined valuation payroll	126,366	41,888
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.90%)**	**(4.35%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	126,366	41,888
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of West Linn/2126
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of West Linn/2126

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of West Linn/2126

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of West Linn -- #2126

December 2013

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Executive Summary

Milliman has prepared this report for City of West Linn to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of West Linn.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of West Linn

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.55%	13.44%	16.82%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.67%)	(3.67%)	(3.67%)	(3.67%)	(3.67%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.72%**	**14.61%**	**17.99%**	**8.53%**	**12.63%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.28%**	**15.17%**	**18.55%**	**9.01%**	**13.11%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.19%	10.07%	17.79%	8.52%	11.23%
July 1, 2013 to June 30, 2015	12.36%	10.15%	17.35%	8.53%	11.26%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of West Linn

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$9,134,504	$13,362,400
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,688,704)	(3,754,030)
Allocated pooled OPSRP UAL	628,816	143,019
Side account	0	0
Net unfunded pension actuarial accrued liability	6,074,616	9,751,389
Combined valuation payroll	8,921,556	8,382,138
Net pension UAL as a percentage of payroll	68%	116%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.67%)	(3.85%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$187,178	$217,144
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,864,294	$294,558	5.78%	$1,991,085	$115,085
Tier 2 General Service	10.58%	1,537,334	162,650	10.42%	1,664,350	173,425
Total General Service		**3,401,628**	**457,208**		**3,655,435**	**288,510**
Tier 1 Police & Fire	17.89%	847,362	151,593	15.06%	834,197	125,630
Tier 2 Police & Fire	15.70%	805,260	126,426	15.12%	782,851	118,367
Total Police & Fire		**1,652,622**	**278,019**		**1,617,048**	**243,997**
Total		**$5,054,250**	**$735,227**		**$5,272,483**	**$532,507**
Employer normal cost rate						
General Service			**13.44%**			**7.89%**
Police & Fire			**16.82%**			**15.09%**
Aggregate (Default)			**14.55%**			**10.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,754,030)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.79%)
B. Actual employer payroll	4,376,558
C. Payment to transition liability/(surplus)	(165,872)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.79%)
B. Actual employer payroll	4,556,473
C. Payment to transition liability/(surplus)	(172,691)
4. Supplemental payment to transition liability	0
5. Interest	(273,237)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($3,688,704)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,688,704)	(3,754,030)
2. Combined valuation payroll	8,921,556	8,382,138
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.67%)**	**(3.85%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	8,921,556	8,382,138
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Warrenton/2238
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Warrenton/2238

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Warrenton/2238

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Warrenton -- #2238

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Warrenton to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Warrenton.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Warrenton

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.52%	13.46%	16.37%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.82%)	(2.82%)	(2.82%)	(2.82%)	(2.82%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.54%**	**15.48%**	**18.39%**	**9.38%**	**13.48%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.10%**	**16.04%**	**18.95%**	**9.86%**	**13.96%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.53%	10.95%	18.28%	9.25%	11.96%
July 1, 2013 to June 30, 2015	14.04%	11.29%	18.27%	9.44%	12.17%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Warrenton

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,159,329	$3,216,743
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(670,888)	(690,470)
Allocated pooled OPSRP UAL	148,647	34,429
Side account	0	0
Net unfunded pension actuarial accrued liability	1,637,088	2,560,702
Combined valuation payroll	2,108,990	2,017,840
Net pension UAL as a percentage of payroll	78%	127%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.82%)	(2.94%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$44,248	$52,273
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$414,719	$65,526	5.78%	$378,533	$21,879
Tier 2 General Service	10.58%	336,183	35,568	10.42%	383,556	39,967
Total General Service		**750,902**	**101,094**		**762,089**	**61,846**
Tier 1 Police & Fire	17.89%	131,034	23,442	15.06%	126,742	19,087
Tier 2 Police & Fire	15.70%	298,653	46,889	15.12%	368,911	55,779
Total Police & Fire		**429,687**	**70,331**		**495,653**	**74,866**
Total		**$1,180,589**	**$171,425**		**$1,257,742**	**$136,712**
Employer normal cost rate						
General Service			**13.46%**			**8.12%**
Police & Fire			**16.37%**			**15.10%**
Aggregate (Default)			**14.52%**			**10.87%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($690,470)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.06%)
B. Actual employer payroll	1,042,618
C. Payment to transition liability/(surplus)	(31,904)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.06%)
B. Actual employer payroll	1,221,376
C. Payment to transition liability/(surplus)	(37,373)
4. Supplemental payment to transition liability	0
5. Interest	(49,695)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($670,888)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(670,888)	(690,470)
2. Combined valuation payroll	2,108,990	2,017,840
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.82%)**	**(2.94%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,108,990	2,017,840
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Wallowa/2200
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Wallowa/2200

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Wallowa/2200

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Wallowa -- #2200

December 2013

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Executive Summary

Milliman has prepared this report for City of Wallowa to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Wallowa.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Wallowa

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.58%	11.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(6.38%)	(6.38%)	(6.38%)	(6.38%)	(6.38%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**8.28%**	**8.28%**	**13.42%**	**4.06%**	**8.16%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**8.84%**	**8.84%**	**13.98%**	**4.54%**	**8.64%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.68%	0.68%	6.90%	0.00%	0.38%
July 1, 2013 to June 30, 2015	6.97%	6.97%	12.60%	3.78%	6.51%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Wallowa

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$138,301	$209,856
Allocated pre-SLGRP pooled liability/(surplus)	(26,765)	(26,862)
Transition liability/(surplus)	(97,161)	(104,676)
Allocated pooled OPSRP UAL	9,521	2,246
Side account	0	0
Net unfunded pension actuarial accrued liability	23,896	80,564
Combined valuation payroll	135,077	131,641
Net pension UAL as a percentage of payroll	18%	61%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(6.38%)	(6.84%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,834	$3,410
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$9,732	$1,538	5.78%	$10,443	$604
Tier 2 General Service	10.58%	41,119	4,350	10.42%	39,911	4,159
Total General Service		**50,851**	**5,888**		**50,354**	**4,763**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$50,851**	**$5,888**		**$50,354**	**$4,763**
Employer normal cost rate						
General Service			**11.58%**			**9.46%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.58%**			**9.46%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($104,676)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(12.94%)
B. Actual employer payroll	63,405
C. Payment to transition liability/(surplus)	(7,297)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(12.94%)
B. Actual employer payroll	64,547
C. Payment to transition liability/(surplus)	(7,415)
4. Supplemental payment to transition liability	0
5. Interest	(7,197)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($97,161)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(97,161)	(104,676)
2. Combined valuation payroll	135,077	131,641
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.38%)**	**(6.84%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	135,077	131,641
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Vernonia/2125
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Vernonia/2125

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Vernonia/2125

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Vernonia -- #2125

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Vernonia to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Vernonia.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Vernonia

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.83%	11.83%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(5.21%)	(5.21%)	(5.21%)	(5.21%)	(5.21%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.70%**	**9.70%**	**14.59%**	**5.23%**	**9.33%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.26%**	**10.26%**	**15.15%**	**5.71%**	**9.81%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.10%	5.10%	12.16%	2.93%	5.64%
July 1, 2013 to June 30, 2015	7.48%	7.48%	13.43%	4.61%	7.34%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Vernonia

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$694,892	$961,414
Allocated pre-SLGRP pooled liability/(surplus)	(134,480)	(123,062)
Transition liability/(surplus)	(398,610)	(421,096)
Allocated pooled OPSRP UAL	47,836	10,290
Side account	0	0
Net unfunded pension actuarial accrued liability	209,638	427,546
Combined valuation payroll	678,692	603,088
Net pension UAL as a percentage of payroll	31%	71%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(5.21%)	(6.01%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$14,239	$15,623
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$65,483	$10,346	5.78%	$64,593	$3,733
Tier 2 General Service	10.58%	207,492	21,953	10.42%	169,457	17,657
Total General Service		**272,975**	**32,299**		**234,050**	**21,390**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$272,975**	**$32,299**		**$234,050**	**$21,390**
Employer normal cost rate						
General Service			**11.83%**			**9.14%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.83%**			**9.14%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($421,096)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.68%)
B. Actual employer payroll	332,834
C. Payment to transition liability/(surplus)	(25,562)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.68%)
B. Actual employer payroll	344,413
C. Payment to transition liability/(surplus)	(26,451)
4. Supplemental payment to transition liability	0
5. Interest	(29,527)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($398,610)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(398,610)	(421,096)
2. Combined valuation payroll	678,692	603,088
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.21%)**	**(6.01%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	678,692	603,088
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Veneta/2285
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Veneta/2285

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Veneta/2285

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Veneta -- #2285

December 2013

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Executive Summary

Milliman has prepared this report for City of Veneta to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Veneta.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Veneta

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.07%	14.07%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.90%)	(2.90%)	(2.90%)	(2.90%)	(2.90%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.25%**	**14.25%**	**16.90%**	**7.54%**	**11.64%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.81%**	**14.81%**	**17.46%**	**8.02%**	**12.12%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.13%	9.13%	17.19%	7.96%	10.67%
July 1, 2013 to June 30, 2015	9.10%	9.10%	16.49%	7.67%	10.40%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Veneta

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$739,720	$1,114,127
Allocated pre-SLGRP pooled liability/(surplus)	(143,156)	(142,610)
Transition liability/(surplus)	(236,533)	(239,924)
Allocated pooled OPSRP UAL	50,922	11,925
Side account	0	0
Net unfunded pension actuarial accrued liability	410,953	743,518
Combined valuation payroll	722,475	698,884
Net pension UAL as a percentage of payroll	57%	106%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.90%)	(2.95%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$15,158	$18,105
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$284,354	$44,928	5.78%	$270,810	$15,653
Tier 2 General Service	10.58%	140,654	14,881	10.42%	190,850	19,887
Total General Service		**425,008**	**59,809**		**461,660**	**35,540**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$425,008**	**$59,809**		**$461,660**	**$35,540**
Employer normal cost rate						
General Service			**14.07%**			**7.70%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.07%**			**7.70%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($239,924)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.65%)
B. Actual employer payroll	379,280
C. Payment to transition liability/(surplus)	(10,051)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.65%)
B. Actual employer payroll	409,828
C. Payment to transition liability/(surplus)	(10,861)
4. Supplemental payment to transition liability	0
5. Interest	(17,521)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($236,533)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(236,533)	(239,924)
2. Combined valuation payroll	722,475	698,884
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.90%)**	**(2.95%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	722,475	698,884
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Vale/2145
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Vale/2145

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Vale/2145

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Vale -- #2145

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Vale to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Vale.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Vale

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.73%	13.71%	15.77%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	6.87%	6.87%	6.87%	6.87%	6.87%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**23.68%**	**23.66%**	**25.72%**	**17.31%**	**21.41%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**24.24%**	**24.22%**	**26.28%**	**17.79%**	**21.89%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.54%	17.50%	26.20%	16.52%	19.23%
July 1, 2013 to June 30, 2015	18.47%	18.37%	26.20%	17.37%	20.10%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Vale

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$373,209	$589,243
Allocated pre-SLGRP pooled liability/(surplus)	(72,226)	(75,424)
Transition liability/(surplus)	282,234	289,929
Allocated pooled OPSRP UAL	25,692	6,307
Side account	0	0
Net unfunded pension actuarial accrued liability	608,909	810,055
Combined valuation payroll	364,509	369,628
Net pension UAL as a percentage of payroll	167%	219%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	6.87%	6.75%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$7,648	$9,575
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$134,201	$21,204	5.78%	$185,139	$10,701
Tier 2 General Service	10.58%	89,788	9,500	10.42%	87,635	9,132
Total General Service		**223,989**	**30,704**		**272,774**	**19,833**
Tier 1 Police & Fire	17.89%	111	20	15.06%	793	119
Tier 2 Police & Fire	15.70%	2,761	433	15.12%	2,650	401
Total Police & Fire		**2,872**	**453**		**3,443**	**520**
Total		**$226,861**	**$31,157**		**$276,217**	**$20,353**
Employer normal cost rate						
General Service			**13.71%**			**7.27%**
Police & Fire			**15.77%**			**15.10%**
Aggregate (Default)			**13.73%**			**7.37%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$289,929
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	5.91%
B. Actual employer payroll	218,248
C. Payment to transition liability/(surplus)	12,898
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	5.91%
B. Actual employer payroll	265,701
C. Payment to transition liability/(surplus)	15,703
4. Supplemental payment to transition liability	0
5. Interest	20,906
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$282,234**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	282,234	289,929
2. Combined valuation payroll	364,509	369,628
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**6.87%**	**6.75%**

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	364,509	369,628
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Umatilla/2175
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Umatilla/2175

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Umatilla/2175

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Umatilla -- #2175

December 2013

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Executive Summary

Milliman has prepared this report for City of Umatilla to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Umatilla.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Umatilla

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.62%	12.10%	17.07%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(9.45%)	(9.45%)	(9.45%)	(9.45%)	(9.45%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**7.25%**	**5.73%**	**10.70%**	**0.99%**	**5.09%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**7.81%**	**6.29%**	**11.26%**	**1.47%**	**5.57%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.03%	3.24%	10.18%	0.95%	3.66%
July 1, 2013 to June 30, 2015	5.28%	3.70%	10.05%	1.24%	3.97%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Umatilla

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,576,745	$2,440,225
Allocated pre-SLGRP pooled liability/(surplus)	(305,143)	(312,352)
Transition liability/(surplus)	(1,640,985)	(1,675,784)
Allocated pooled OPSRP UAL	108,543	26,118
Side account	0	0
Net unfunded pension actuarial accrued liability	(260,840)	478,207
Combined valuation payroll	1,539,987	1,530,736
Net pension UAL as a percentage of payroll	(17%)	31%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(9.45%)	(9.42%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$32,310	$39,654
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$146,565	$23,157	5.78%	$234,662	$13,563
Tier 2 General Service	10.58%	356,857	37,755	10.42%	408,002	42,514
Total General Service		**503,422**	**60,912**		**642,664**	**56,077**
Tier 1 Police & Fire	17.89%	139,519	24,960	15.06%	138,170	20,808
Tier 2 Police & Fire	15.70%	83,299	13,078	15.12%	76,076	11,503
Total Police & Fire		**222,818**	**38,038**		**214,246**	**32,311**
Total		**$726,240**	**$98,950**		**$856,910**	**$88,388**
Employer normal cost rate						
General Service			**12.10%**			**8.73%**
Police & Fire			**17.07%**			**15.08%**
Aggregate (Default)			**13.62%**			**10.31%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,675,784)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.66%)
B. Actual employer payroll	846,267
C. Payment to transition liability/(surplus)	(81,749)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.66%)
B. Actual employer payroll	772,289
C. Payment to transition liability/(surplus)	(74,604)
4. Supplemental payment to transition liability	0
5. Interest	(121,554)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,640,985)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,640,985)	(1,675,784)
2. Combined valuation payroll	1,539,987	1,530,736
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.45%)**	**(9.42%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,539,987	1,530,736
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Turner/2228
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Turner/2228

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Turner/2228

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Turner -- #2228

December 2013

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Executive Summary

Milliman has prepared this report for City of Turner to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Turner.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Turner

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.21%	10.58%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(0.69%)	(0.69%)	(0.69%)	(0.69%)	(0.69%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.36%**	**14.73%**	**19.85%**	**11.51%**	**15.61%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.92%**	**15.29%**	**20.41%**	**11.99%**	**16.09%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.13%	15.61%	20.66%	11.85%	14.56%
July 1, 2013 to June 30, 2015	17.32%	15.87%	20.57%	11.72%	14.45%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Turner

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$335,725	$518,747
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(25,386)	(24,963)
Allocated pooled OPSRP UAL	23,111	5,552
Side account	0	0
Net unfunded pension actuarial accrued liability	333,450	499,336
Combined valuation payroll	327,898	325,406
Net pension UAL as a percentage of payroll	102%	153%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(0.69%)	(0.66%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,879	$8,430
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	131,645	13,928	10.42%	128,472	13,387
Total General Service		**131,645**	**13,928**		**128,472**	**13,387**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	61,458	9,649	15.12%	57,237	8,654
Total Police & Fire		**61,458**	**9,649**		**57,237**	**8,654**
Total		**$193,103**	**$23,577**		**$185,709**	**$22,041**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**12.21%**			**11.87%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($24,963)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.46%)
B. Actual employer payroll	155,161
C. Payment to transition liability/(surplus)	(714)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.46%)
B. Actual employer payroll	161,489
C. Payment to transition liability/(surplus)	(743)
4. Supplemental payment to transition liability	0
5. Interest	(1,880)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($25,386)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(25,386)	(24,963)
2. Combined valuation payroll	327,898	325,406
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.69%)**	**(0.66%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	327,898	325,406
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Tualatin/2288
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Tualatin/2288

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Tualatin/2288

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Tualatin -- #2288

December 2013

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Executive Summary

Milliman has prepared this report for City of Tualatin to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Tualatin.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Tualatin

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.28%	12.44%	16.88%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.38%	1.38%	1.38%	1.38%	1.38%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.74%**	**16.90%**	**21.34%**	**11.82%**	**15.92%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.30%**	**17.46%**	**21.90%**	**12.30%**	**16.40%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.34%	13.62%	21.37%	12.09%	14.80%
July 1, 2013 to June 30, 2015	16.92%	14.39%	20.93%	12.11%	14.84%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Tualatin

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$10,451,396	$14,768,658
Allocated pre-SLGRP pooled liability/(surplus)	(2,022,628)	(1,890,410)
Transition liability/(surplus)	1,583,710	1,608,000
Allocated pooled OPSRP UAL	719,470	158,070
Side account	0	0
Net unfunded pension actuarial accrued liability	10,731,948	14,644,318
Combined valuation payroll	10,207,747	9,264,274
Net pension UAL as a percentage of payroll	105%	158%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.38%	1.49%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$214,163	$239,996
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,113,551	$175,941	5.78%	$1,319,613	$76,274
Tier 2 General Service	10.58%	2,008,790	212,530	10.42%	1,947,160	202,894
Total General Service		**3,122,341**	**388,471**		**3,266,773**	**279,168**
Tier 1 Police & Fire	17.89%	1,184,952	211,988	15.06%	1,061,590	159,875
Tier 2 Police & Fire	15.70%	1,011,980	158,881	15.12%	1,004,562	151,890
Total Police & Fire		**2,196,932**	**370,869**		**2,066,152**	**311,765**
Total		**$5,319,273**	**$759,340**		**$5,332,925**	**$590,933**
Employer normal cost rate						
General Service			**12.44%**			**8.55%**
Police & Fire			**16.88%**			**15.09%**
Aggregate (Default)			**14.28%**			**11.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$1,608,000
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.48%
B. Actual employer payroll	4,658,473
C. Payment to transition liability/(surplus)	68,945
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.48%
B. Actual employer payroll	4,909,193
C. Payment to transition liability/(surplus)	72,657
4. Supplemental payment to transition liability	0
5. Interest	117,312
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$1,583,710**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	1,583,710	1,608,000
2. Combined valuation payroll	10,207,747	9,264,274
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.38%**	**1.49%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	10,207,747	9,264,274
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Troutdale/2237
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Troutdale/2237

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
City of Troutdale/2237

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Troutdale -- #2237

December 2013

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Executive Summary

Milliman has prepared this report for City of Troutdale to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Troutdale.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Troutdale

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.45%	13.36%	16.46%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.37%	4.37%	4.37%	4.37%	4.37%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.94%)	(5.94%)	(5.94%)	(5.94%)	(5.94%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.48%**	**12.39%**	**15.49%**	**6.39%**	**10.49%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.04%**	**12.95%**	**16.05%**	**6.87%**	**10.97%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.32%	8.75%	16.41%	7.18%	9.89%
July 1, 2013 to June 30, 2015	10.81%	8.42%	15.69%	6.86%	9.59%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Troutdale

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,508,903	$6,991,038
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(2,948,996)	(2,972,408)
Allocated pooled OPSRP UAL	310,391	74,826
Side account	0	0
Net unfunded pension actuarial accrued liability	1,870,298	4,093,456
Combined valuation payroll	4,403,789	4,385,428
Net pension UAL as a percentage of payroll	42%	93%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.94%)	(5.83%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$92,393	$113,607
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$994,402	$157,116	5.78%	$1,151,401	$66,551
Tier 2 General Service	10.58%	870,322	92,080	10.42%	914,412	95,282
Total General Service		**1,864,724**	**249,196**		**2,065,813**	**161,833**
Tier 1 Police & Fire	17.89%	350,499	62,704	15.06%	340,708	51,311
Tier 2 Police & Fire	15.70%	653,030	102,526	15.12%	670,235	101,340
Total Police & Fire		**1,003,529**	**165,230**		**1,010,943**	**152,651**
Total		**$2,868,253**	**$414,426**		**$3,076,756**	**$314,484**
Employer normal cost rate						
General Service			**13.36%**			**7.83%**
Police & Fire			**16.46%**			**15.10%**
Aggregate (Default)			**14.45%**			**10.22%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($2,972,408)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.25%)
B. Actual employer payroll	2,282,766
C. Payment to transition liability/(surplus)	(119,845)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.25%)
B. Actual employer payroll	2,324,016
C. Payment to transition liability/(surplus)	(122,011)
4. Supplemental payment to transition liability	0
5. Interest	(218,444)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($2,948,996)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(2,948,996)	(2,972,408)
2. Combined valuation payroll	4,403,789	4,385,428
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.94%)**	**(5.83%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	4,403,789	4,385,428
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Toledo/2275
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Toledo/2275

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Toledo/2275

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

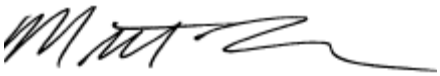
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

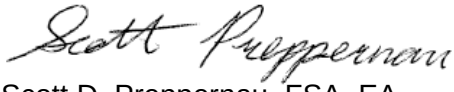
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Toledo -- #2275

December 2013

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Executive Summary

Milliman has prepared this report for City of Toledo to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Toledo.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Toledo

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.64%	14.01%	16.14%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(8.41%)	(8.41%)	(8.41%)	(8.41%)	(8.41%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.31%**	**8.68%**	**10.81%**	**2.03%**	**6.13%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**9.87%**	**9.24%**	**11.37%**	**2.51%**	**6.61%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.06%	2.88%	10.71%	1.76%	4.47%
July 1, 2013 to June 30, 2015	6.04%	3.76%	11.49%	2.65%	5.38%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Toledo

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,216,459	$3,600,706
Allocated pre-SLGRP pooled liability/(surplus)	(428,945)	(460,896)
Transition liability/(surplus)	(2,051,223)	(2,092,650)
Allocated pooled OPSRP UAL	152,580	38,539
Side account	0	0
Net unfunded pension actuarial accrued liability	(111,129)	1,085,699
Combined valuation payroll	2,164,788	2,258,697
Net pension UAL as a percentage of payroll	(5%)	48%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(8.41%)	(7.97%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$45,418	$58,513
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$486,437	$76,857	5.78%	$516,776	$29,870
Tier 2 General Service	10.58%	254,623	26,939	10.42%	271,427	28,283
Total General Service		**741,060**	**103,796**		**788,203**	**58,153**
Tier 1 Police & Fire	17.89%	63,054	11,280	15.06%	60,435	9,102
Tier 2 Police & Fire	15.70%	247,276	38,822	15.12%	269,140	40,694
Total Police & Fire		**310,330**	**50,102**		**329,575**	**49,796**
Total		**$1,051,390**	**$153,898**		**$1,117,778**	**$107,949**
Employer normal cost rate						
General Service			**14.01%**			**7.38%**
Police & Fire			**16.14%**			**15.11%**
Aggregate (Default)			**14.64%**			**9.66%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($2,092,650)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.85%)
B. Actual employer payroll	1,093,750
C. Payment to transition liability/(surplus)	(96,797)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.85%)
B. Actual employer payroll	1,091,211
C. Payment to transition liability/(surplus)	(96,572)
4. Supplemental payment to transition liability	0
5. Interest	(151,942)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($2,051,223)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(2,051,223)	(2,092,650)
2. Combined valuation payroll	2,164,788	2,258,697
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.41%)**	**(7.97%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,164,788	2,258,697
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Tillamook/2128
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Tillamook/2128

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Tillamook/2128

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Tillamook -- #2128

December 2013

Secondary Employers

2755 Tillamook Water Commission

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Executive Summary

Milliman has prepared this report for City of Tillamook to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Tillamook.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Tillamook

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.48%	12.55%	16.41%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.84%)	(3.84%)	(3.84%)	(3.84%)	(3.84%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.48%**	**13.55%**	**17.41%**	**8.36%**	**12.46%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.04%**	**14.11%**	**17.97%**	**8.84%**	**12.94%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.50%	10.44%	17.67%	8.31%	11.02%
July 1, 2013 to June 30, 2015	12.48%	10.90%	17.20%	8.38%	11.11%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Tillamook

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,653,172	$2,395,285
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(698,420)	(714,281)
Allocated pooled OPSRP UAL	113,804	25,637
Side account	0	0
Net unfunded pension actuarial accrued liability	1,068,556	1,706,641
Combined valuation payroll	1,614,632	1,502,545
Net pension UAL as a percentage of payroll	66%	114%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.84%)	(4.09%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$33,876	$38,924
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$313,863	$49,590	5.78%	$316,448	$18,291
Tier 2 General Service	10.58%	516,483	54,644	10.42%	586,774	61,142
Total General Service		**830,346**	**104,234**		**903,222**	**79,433**
Tier 1 Police & Fire	17.89%	85,651	15,323	15.06%	153,013	23,044
Tier 2 Police & Fire	15.70%	178,990	28,101	15.12%	148,471	22,449
Total Police & Fire		**264,641**	**43,424**		**301,484**	**45,493**
Total		**$1,094,987**	**$147,658**		**$1,204,706**	**$124,926**
Employer normal cost rate						
General Service			**12.55%**			**8.79%**
Police & Fire			**16.41%**			**15.09%**
Aggregate (Default)			**13.48%**			**10.37%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($714,281)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.00%)
B. Actual employer payroll	810,796
C. Payment to transition liability/(surplus)	(32,432)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.00%)
B. Actual employer payroll	879,118
C. Payment to transition liability/(surplus)	(35,164)
4. Supplemental payment to transition liability	0
5. Interest	(51,735)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($698,420)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(698,420)	(714,281)
2. Combined valuation payroll	1,614,632	1,502,545
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.84%)**	**(4.09%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,614,632	1,502,545
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Tigard/2295
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Tigard/2295

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Tigard/2295

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

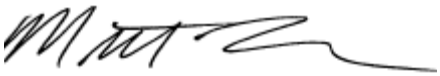
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

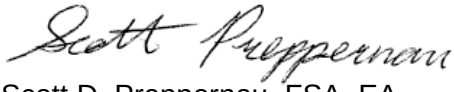
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Tigard -- #2295

December 2013

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Executive Summary

Milliman has prepared this report for City of Tigard to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Tigard.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Tigard

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.55%	13.34%	16.55%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(5.27%)	(5.27%)	(5.27%)	(5.27%)	(5.27%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.36%**	**11.15%**	**14.36%**	**5.17%**	**9.27%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.92%**	**11.71%**	**14.92%**	**5.65%**	**9.75%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.65%	6.92%	14.65%	5.47%	8.18%
July 1, 2013 to June 30, 2015	14.78%	7.60%	14.78%	5.95%	8.68%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Tigard

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,839,026	$9,365,228
Allocated pre-SLGRP pooled liability/(surplus)	(1,130,009)	(1,198,763)
Transition liability/(surplus)	(3,390,044)	(3,427,417)
Allocated pooled OPSRP UAL	401,956	100,237
Side account	0	0
Net unfunded pension actuarial accrued liability	1,720,929	4,839,285
Combined valuation payroll	5,702,903	5,874,741
Net pension UAL as a percentage of payroll	30%	82%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(5.27%)	(5.02%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$119,649	$152,188
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	1,360,122	243,326	15.06%	1,362,139	205,138
Tier 2 Police & Fire	15.70%	2,161,671	339,382	15.12%	2,284,859	345,471
Total Police & Fire		**3,521,793**	**582,708**		**3,646,998**	**550,609**
Total		**$3,521,793**	**$582,708**		**$3,646,998**	**$550,609**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.55%**			**15.10%**
Aggregate (Default)			**16.55%**			**15.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,427,417)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.14%)
B. Actual employer payroll	2,788,406
C. Payment to transition liability/(surplus)	(143,324)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.14%)
B. Actual employer payroll	2,824,189
C. Payment to transition liability/(surplus)	(145,163)
4. Supplemental payment to transition liability	0
5. Interest	(251,114)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($3,390,044)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,390,044)	(3,427,417)
2. Combined valuation payroll	5,702,903	5,874,741
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.27%)**	**(5.02%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	5,702,903	5,874,741
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Talent/2188
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Talent/2188

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
City of Talent/2188

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Talent -- #2188

December 2013

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Executive Summary

Milliman has prepared this report for City of Talent to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Talent.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Talent

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.81%	14.48%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(7.18%)	(7.18%)	(7.18%)	(7.18%)	(7.18%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.47%**	**12.14%**	**13.36%**	**5.02%**	**9.12%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.03%**	**12.70%**	**13.92%**	**5.50%**	**9.60%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.24%	5.51%	13.24%	4.43%	7.14%
July 1, 2013 to June 30, 2015	8.53%	6.23%	14.41%	5.56%	8.29%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Talent

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,046,120	$1,539,554
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(827,235)	(860,459)
Allocated pooled OPSRP UAL	72,014	16,478
Side account	0	0
Net unfunded pension actuarial accrued liability	290,899	695,573
Combined valuation payroll	1,021,732	965,751
Net pension UAL as a percentage of payroll	28%	72%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(7.18%)	(7.66%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$21,436	$25,018
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$271,605	$42,914	5.78%	$268,664	$15,529
Tier 2 General Service	10.58%	92,282	9,763	10.42%	89,455	9,321
Total General Service		**363,887**	**52,677**		**358,119**	**24,850**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	136,804	21,478	15.12%	139,978	21,165
Total Police & Fire		**136,804**	**21,478**		**139,978**	**21,165**
Total		**$500,691**	**$74,155**		**$498,097**	**$46,015**
Employer normal cost rate						
General Service			**14.48%**			**6.94%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**14.81%**			**9.24%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($860,459)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.88%)
B. Actual employer payroll	576,389
C. Payment to transition liability/(surplus)	(45,419)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.88%)
B. Actual employer payroll	622,850
C. Payment to transition liability/(surplus)	(49,082)
4. Supplemental payment to transition liability	0
5. Interest	(61,277)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($827,235)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(827,235)	(860,459)
2. Combined valuation payroll	1,021,732	965,751
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(7.18%)**	**(7.66%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,021,732	965,751
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Sutherlin/2217
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Sutherlin/2217

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Sutherlin/2217

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Sutherlin -- #2217

December 2013

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Executive Summary

Milliman has prepared this report for City of Sutherlin to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Sutherlin.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Sutherlin

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.60%	13.61%	16.42%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(8.01%)	(8.01%)	(8.01%)	(8.01%)	(8.01%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.67%**	**8.68%**	**11.49%**	**2.43%**	**6.53%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.23%**	**9.24%**	**12.05%**	**2.91%**	**7.01%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.83%	6.49%	14.20%	5.05%	7.76%
July 1, 2013 to June 30, 2015	8.22%	5.69%	13.12%	4.30%	7.03%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Sutherlin

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,027,328	$3,405,384
Allocated pre-SLGRP pooled liability/(surplus)	(392,343)	(435,894)
Transition liability/(surplus)	(1,788,317)	(1,782,901)
Allocated pooled OPSRP UAL	139,561	36,448
Side account	0	0
Net unfunded pension actuarial accrued liability	(13,771)	1,223,037
Combined valuation payroll	1,980,066	2,136,173
Net pension UAL as a percentage of payroll	(1%)	57%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(8.01%)	(7.18%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$41,543	$55,339
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$458,156	$72,389	5.78%	$556,061	$32,140
Tier 2 General Service	10.58%	331,839	35,109	10.42%	379,008	39,493
Total General Service		**789,995**	**107,498**		**935,069**	**71,633**
Tier 1 Police & Fire	17.89%	141,880	25,382	15.06%	206,008	31,025
Tier 2 Police & Fire	15.70%	287,308	45,107	15.12%	277,080	41,894
Total Police & Fire		**429,188**	**70,489**		**483,088**	**72,919**
Total		**$1,219,183**	**$177,987**		**$1,418,157**	**$144,552**
Employer normal cost rate						
General Service			**13.61%**			**7.66%**
Police & Fire			**16.42%**			**15.09%**
Aggregate (Default)			**14.60%**			**10.19%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,782,901)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.56%)
B. Actual employer payroll	1,155,943
C. Payment to transition liability/(surplus)	(64,270)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.56%)
B. Actual employer payroll	1,129,172
C. Payment to transition liability/(surplus)	(62,782)
4. Supplemental payment to transition liability	0
5. Interest	(132,468)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,788,317)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,788,317)	(1,782,901)
2. Combined valuation payroll	1,980,066	2,136,173
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.01%)**	**(7.18%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,980,066	2,136,173
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Stayton/2757
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Stayton/2757

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Stayton/2757

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Stayton -- #2757

December 2013

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Executive Summary

Milliman has prepared this report for City of Stayton to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Stayton.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Stayton

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.00%)	(1.00%)	(1.00%)	(1.00%)	(1.00%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.78%**	**15.42%**	**17.78%**	**9.44%**	**13.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.34%**	**15.98%**	**18.34%**	**9.92%**	**14.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.57%	11.21%	18.57%	9.76%	12.47%
July 1, 2013 to June 30, 2015	18.55%	11.35%	18.55%	9.70%	12.43%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Stayton

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$832,783	$1,365,302
Allocated pre-SLGRP pooled liability/(surplus)	(161,166)	(174,761)
Transition liability/(surplus)	(91,374)	(91,651)
Allocated pooled OPSRP UAL	57,328	14,613
Side account	0	0
Net unfunded pension actuarial accrued liability	637,571	1,113,503
Combined valuation payroll	813,369	856,444
Net pension UAL as a percentage of payroll	78%	130%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.00%)	(0.92%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$17,065	$22,187
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	502,446	78,884	15.12%	485,306	73,378
Total Police & Fire		**502,446**	**78,884**		**485,306**	**73,378**
Total		**$502,446**	**$78,884**		**$485,306**	**$73,378**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($91,651)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.85%)
B. Actual employer payroll	407,203
C. Payment to transition liability/(surplus)	(3,461)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.85%)
B. Actual employer payroll	421,514
C. Payment to transition liability/(surplus)	(3,584)
4. Supplemental payment to transition liability	0
5. Interest	(6,768)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($91,374)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(91,374)	(91,651)
2. Combined valuation payroll	813,369	856,444
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.00%)**	**(0.92%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	813,369	856,444
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of St Helens/2123
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of St Helens/2123

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of St Helens/2123

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of St Helens -- #2123

December 2013

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Executive Summary

Milliman has prepared this report for City of St Helens to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of St Helens.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of St Helens

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.72%	12.32%	16.95%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	1.99%	1.99%	1.99%	1.99%	1.99%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.55%**	**19.15%**	**23.78%**	**14.19%**	**18.29%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.11%**	**19.71%**	**24.34%**	**14.67%**	**18.77%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.27%	16.00%	23.28%	13.95%	16.66%
July 1, 2013 to June 30, 2015	18.72%	16.89%	22.98%	14.17%	16.90%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of St Helens

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,038,597	$6,749,127
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	882,897	882,234
Allocated pooled OPSRP UAL	278,015	72,237
Side account	0	0
Net unfunded pension actuarial accrued liability	5,199,509	7,703,598
Combined valuation payroll	3,944,447	4,233,679
Net pension UAL as a percentage of payroll	132%	182%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	1.99%	1.79%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$82,756	$109,676
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$554,918	$87,677	5.78%	$597,001	$34,507
Tier 2 General Service	10.58%	1,112,995	117,755	10.42%	1,345,526	140,204
Total General Service		**1,667,913**	**205,432**		**1,942,527**	**174,711**
Tier 1 Police & Fire	17.89%	412,532	73,802	15.06%	525,117	79,083
Tier 2 Police & Fire	15.70%	310,376	48,729	15.12%	306,664	46,368
Total Police & Fire		**722,908**	**122,531**		**831,781**	**125,451**
Total		**$2,390,821**	**$327,963**		**$2,774,308**	**$300,162**
Employer normal cost rate						
General Service			**12.32%**			**8.99%**
Police & Fire			**16.95%**			**15.08%**
Aggregate (Default)			**13.72%**			**10.82%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$882,234
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.64%
B. Actual employer payroll	2,012,662
C. Payment to transition liability/(surplus)	33,008
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.64%
B. Actual employer payroll	1,934,714
C. Payment to transition liability/(surplus)	31,729
4. Supplemental payment to transition liability	0
5. Interest	65,400
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$882,897**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	882,897	882,234
2. Combined valuation payroll	3,944,447	4,233,679
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.99%**	**1.79%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,944,447	4,233,679
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Springfield/2278
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Springfield/2278

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Springfield/2278

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Springfield -- #2278

December 2013

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Executive Summary

Milliman has prepared this report for City of Springfield to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Springfield.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Springfield

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.16%	11.95%	16.64%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(7.50%)	(7.50%)	(7.50%)	(7.50%)	(7.50%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.50%**	**9.29%**	**13.98%**	**4.70%**	**8.80%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.06%**	**9.85%**	**14.54%**	**5.18%**	**9.28%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.97%	7.91%	14.38%	5.14%	7.85%
July 1, 2013 to June 30, 2015	10.69%	7.82%	13.54%	4.72%	7.45%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Springfield

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$26,962,783	$40,321,799
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(22,265,793)	(22,510,795)
Allocated pooled OPSRP UAL	1,856,108	431,568
Side account	0	0
Net unfunded pension actuarial accrued liability	6,553,098	18,242,572
Combined valuation payroll	26,334,212	25,293,577
Net pension UAL as a percentage of payroll	25%	72%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(7.50%)	(7.66%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$552,503	$655,243
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,322,274	$366,919	5.78%	$1,887,227	$109,082
Tier 2 General Service	10.58%	6,537,155	691,631	10.42%	6,422,236	669,197
Total General Service		**8,859,429**	**1,058,550**		**8,309,463**	**778,279**
Tier 1 Police & Fire	17.89%	3,382,419	605,115	15.06%	4,029,956	606,911
Tier 2 Police & Fire	15.70%	4,481,724	703,631	15.12%	4,367,203	660,321
Total Police & Fire		**7,864,143**	**1,308,746**		**8,397,159**	**1,267,232**
Total		**$16,723,572**	**$2,367,296**		**$16,706,622**	**$2,045,511**
Employer normal cost rate						
General Service			**11.95%**			**9.37%**
Police & Fire			**16.64%**			**15.09%**
Aggregate (Default)			**14.16%**			**12.24%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($22,510,795)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.17%)
B. Actual employer payroll	13,070,433
C. Payment to transition liability/(surplus)	(937,150)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.17%)
B. Actual employer payroll	13,349,659
C. Payment to transition liability/(surplus)	(957,170)
4. Supplemental payment to transition liability	0
5. Interest	(1,649,318)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($22,265,793)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(22,265,793)	(22,510,795)
2. Combined valuation payroll	26,334,212	25,293,577
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(7.50%)**	**(7.66%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	26,334,212	25,293,577
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Sisters/2221
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Sisters/2221

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Sisters/2221

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Sisters -- #2221

December 2013

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Executive Summary

Milliman has prepared this report for City of Sisters to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Sisters.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Sisters

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.31%	11.31%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(3.70%)	(3.70%)	(3.70%)	(3.70%)	(3.70%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.69%**	**10.69%**	**16.10%**	**6.74%**	**10.84%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.25%**	**11.25%**	**16.66%**	**7.22%**	**11.32%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.50%	10.50%	16.45%	7.22%	9.93%
July 1, 2013 to June 30, 2015	10.37%	10.37%	15.69%	6.87%	9.60%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Sisters

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$865,449	$1,298,250
Allocated pre-SLGRP pooled liability/(surplus)	(167,488)	(166,178)
Transition liability/(surplus)	(352,188)	(354,633)
Allocated pooled OPSRP UAL	59,577	13,895
Side account	0	0
Net unfunded pension actuarial accrued liability	405,350	791,334
Combined valuation payroll	845,273	814,383
Net pension UAL as a percentage of payroll	48%	97%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(3.70%)	(3.75%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$17,734	$21,097
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$63,537	$10,039	5.78%	$60,449	$3,494
Tier 2 General Service	10.58%	392,863	41,565	10.42%	374,290	39,001
Total General Service		**456,400**	**51,604**		**434,739**	**42,495**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$456,400**	**$51,604**		**$434,739**	**$42,495**
Employer normal cost rate						
General Service			**11.31%**			**9.77%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.31%**			**9.77%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($354,633)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.39%)
B. Actual employer payroll	416,496
C. Payment to transition liability/(surplus)	(14,119)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.39%)
B. Actual employer payroll	425,173
C. Payment to transition liability/(surplus)	(14,414)
4. Supplemental payment to transition liability	0
5. Interest	(26,088)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($352,188)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(352,188)	(354,633)
2. Combined valuation payroll	845,273	814,383
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.70%)**	**(3.75%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	845,273	814,383
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Silverton/2273
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Silverton/2273

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Silverton/2273

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Silverton -- #2273

December 2013

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Executive Summary

Milliman has prepared this report for City of Silverton to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Silverton.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Silverton

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.17%	12.94%	16.73%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.09%)	(0.09%)	(0.09%)	(0.09%)	(0.09%)
Side account rate relief [2]	(2.14%)	(2.14%)	(2.14%)	(2.14%)	(2.14%)
Net pension contribution rate	**15.02%**	**13.79%**	**17.58%**	**8.21%**	**12.31%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.58%**	**14.35%**	**18.14%**	**8.69%**	**12.79%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.00%	9.52%	17.80%	8.49%	11.20%
July 1, 2013 to June 30, 2015	12.84%	10.53%	17.44%	8.62%	11.35%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Silverton

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,659,858	$4,274,364
Allocated pre-SLGRP pooled liability/(surplus)	(514,754)	(547,125)
Transition liability/(surplus)	(27,346)	(27,883)
Allocated pooled OPSRP UAL	183,104	45,749
Side account	625,581	595,492
Net unfunded pension actuarial accrued liability	1,675,281	3,149,613
Combined valuation payroll	2,597,850	2,681,278
Net pension UAL as a percentage of payroll	64%	117%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.09%)	(0.09%)
Side account rate relief	(2.14%)	(1.91%)
Allocated pooled RHIA UAL	$54,504	$69,460
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$502,875	$79,454	5.78%	$506,193	$29,258
Tier 2 General Service	10.58%	611,331	64,679	10.42%	540,786	56,350
Total General Service		**1,114,206**	**144,133**		**1,046,979**	**85,608**
Tier 1 Police & Fire	17.89%	251,608	45,013	15.06%	256,293	38,598
Tier 2 Police & Fire	15.70%	283,724	44,545	15.12%	269,376	40,730
Total Police & Fire		**535,332**	**89,558**		**525,669**	**79,328**
Total		**$1,649,538**	**$233,691**		**$1,572,648**	**$164,936**
Employer normal cost rate						
General Service			**12.94%**			**8.18%**
Police & Fire			**16.73%**			**15.09%**
Aggregate (Default)			**14.17%**			**10.49%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($27,883)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.09%)
B. Actual employer payroll	1,454,950
C. Payment to transition liability/(surplus)	(1,309)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.09%)
B. Actual employer payroll	1,393,161
C. Payment to transition liability/(surplus)	(1,254)
4. Supplemental payment to transition liability	0
5. Interest	(2,026)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($27,346)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(27,346)	(27,883)
2. Combined valuation payroll	2,597,850	2,681,278
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.09%)**	**(0.09%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$595,492**	**$595,492**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(52,669)	(52,669)
5. Side account earnings during 2012		83,759	83,759
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$625,581**	**$625,581**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$625,581	$595,492
Side Account 2	0	0
Side Account 3	0	0
Total	**$625,581**	**$595,492**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$625,581	$595,492
2. Combined valuation payroll	2,597,850	2,681,278
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(2.14%)	(1.91%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Sherwood/2142
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Sherwood/2142

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Sherwood/2142

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Sherwood -- #2142

December 2013

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Executive Summary

Milliman has prepared this report for City of Sherwood to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Sherwood.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Sherwood

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.67%	12.00%	16.47%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.46%**	**14.79%**	**19.26%**	**10.15%**	**14.25%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.02%**	**15.35%**	**19.82%**	**10.63%**	**14.73%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.32%	12.63%	19.45%	10.32%	13.03%
July 1, 2013 to June 30, 2015	15.42%	12.95%	19.15%	10.32%	13.05%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Sherwood

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,768,938	$8,606,108
Allocated pre-SLGRP pooled liability/(surplus)	(1,116,445)	(1,101,595)
Transition liability/(surplus)	(182,271)	(185,519)
Allocated pooled OPSRP UAL	397,131	92,112
Side account	0	0
Net unfunded pension actuarial accrued liability	4,867,353	7,411,106
Combined valuation payroll	5,634,449	5,398,550
Net pension UAL as a percentage of payroll	86%	137%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.29%)	(0.30%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$118,213	$139,852
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$498,720	$78,798	5.78%	$578,011	$33,409
Tier 2 General Service	10.58%	1,338,478	141,611	10.42%	1,188,319	123,823
Total General Service		**1,837,198**	**220,409**		**1,766,330**	**157,232**
Tier 1 Police & Fire	17.89%	385,493	68,965	15.06%	466,400	70,240
Tier 2 Police & Fire	15.70%	716,062	112,422	15.12%	706,963	106,893
Total Police & Fire		**1,101,555**	**181,387**		**1,173,363**	**177,133**
Total		**$2,938,753**	**$401,796**		**$2,939,693**	**$334,365**
Employer normal cost rate						
General Service			**12.00%**			**8.90%**
Police & Fire			**16.47%**			**15.10%**
Aggregate (Default)			**13.67%**			**11.37%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($185,519)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.29%)
B. Actual employer payroll	2,831,169
C. Payment to transition liability/(surplus)	(8,210)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.29%)
B. Actual employer payroll	2,944,585
C. Payment to transition liability/(surplus)	(8,540)
4. Supplemental payment to transition liability	0
5. Interest	(13,502)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($182,271)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(182,271)	(185,519)
2. Combined valuation payroll	5,634,449	5,398,550
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.29%)**	**(0.30%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	5,634,449	5,398,550
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Shady Cove/2254
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Shady Cove/2254

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Shady Cove/2254

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Shady Cove -- #2254

December 2013

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Executive Summary

Milliman has prepared this report for City of Shady Cove to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Shady Cove.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Shady Cove

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(12.34%)	(12.34%)	(12.34%)	(12.34%)	(12.34%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**3.08%**	**3.08%**	**9.22%**	**0.00%**	**3.96%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**3.64%**	**3.64%**	**9.78%**	**0.48%**	**4.44%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.55%	8.60%	15.11%	6.30%	9.01%
July 1, 2013 to June 30, 2015	1.34%	1.34%	6.01%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Shady Cove

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$234,384	$277,875
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(318,453)	(307,859)
Allocated pooled OPSRP UAL	16,135	2,974
Side account	0	0
Net unfunded pension actuarial accrued liability	(67,934)	(27,010)
Combined valuation payroll	228,920	174,309
Net pension UAL as a percentage of payroll	(30%)	(16%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(12.34%)	(15.19%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,803	$4,516
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	86,754	9,179	10.42%	83,465	8,697
Total General Service		**86,754**	**9,179**		**83,465**	**8,697**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$86,754**	**$9,179**		**$83,465**	**$8,697**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($307,859)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.01%)
B. Actual employer payroll	106,599
C. Payment to transition liability/(surplus)	(6,407)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.01%)
B. Actual employer payroll	109,615
C. Payment to transition liability/(surplus)	(6,588)
4. Supplemental payment to transition liability	0
5. Interest	(23,589)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($318,453)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(318,453)	(307,859)
2. Combined valuation payroll	228,920	174,309
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(12.34%)**	**(15.19%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	228,920	174,309
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Scappoose/2176
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Scappoose/2176

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Scappoose/2176

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Scappoose -- #2176

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Scappoose to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Scappoose.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Scappoose

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.09%	13.02%	16.63%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.22%)	(1.22%)	(1.22%)	(1.22%)	(1.22%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.71%**	**16.64%**	**20.25%**	**10.98%**	**15.08%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.27%**	**17.20%**	**20.81%**	**11.46%**	**15.56%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.10%	12.69%	20.03%	10.92%	13.63%
July 1, 2013 to June 30, 2015	15.28%	13.27%	20.14%	11.31%	14.04%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Scappoose

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,193,564	$3,207,403
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(293,919)	(300,520)
Allocated pooled OPSRP UAL	151,004	34,329
Side account	0	0
Net unfunded pension actuarial accrued liability	2,050,649	2,941,212
Combined valuation payroll	2,142,426	2,011,981
Net pension UAL as a percentage of payroll	96%	146%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.22%)	(1.28%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$44,949	$52,121
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$461,882	$72,977	5.78%	$450,784	$26,055
Tier 2 General Service	10.58%	527,398	55,799	10.42%	505,685	52,692
Total General Service		**989,280**	**128,776**		**956,469**	**78,747**
Tier 1 Police & Fire	17.89%	177,815	31,811	15.06%	162,150	24,420
Tier 2 Police & Fire	15.70%	242,612	38,090	15.12%	232,603	35,170
Total Police & Fire		**420,427**	**69,901**		**394,753**	**59,590**
Total		**$1,409,707**	**$198,677**		**$1,351,222**	**$138,337**
Employer normal cost rate						
General Service			**13.02%**			**8.23%**
Police & Fire			**16.63%**			**15.10%**
Aggregate (Default)			**14.09%**			**10.24%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($300,520)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.39%)
B. Actual employer payroll	998,150
C. Payment to transition liability/(surplus)	(13,874)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.39%)
B. Actual employer payroll	1,043,092
C. Payment to transition liability/(surplus)	(14,499)
4. Supplemental payment to transition liability	0
5. Interest	(21,772)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($293,919)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(293,919)	(300,520)
2. Combined valuation payroll	2,142,426	2,011,981
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.22%)**	**(1.28%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,142,426	2,011,981
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Sandy/2172
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Sandy/2172

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Sandy/2172

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Sandy -- #2172

December 2013

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Executive Summary

Milliman has prepared this report for City of Sandy to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Sandy.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Sandy

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.19%	13.47%	16.08%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.87%)	(0.87%)	(0.87%)	(0.87%)	(0.87%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.40%**	**15.68%**	**18.29%**	**9.57%**	**13.67%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.96%**	**16.24%**	**18.85%**	**10.05%**	**14.15%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.65%	10.77%	18.49%	9.53%	12.24%
July 1, 2013 to June 30, 2015	13.16%	11.19%	18.50%	9.66%	12.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Sandy

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,362,432	$4,718,236
Allocated pre-SLGRP pooled liability/(surplus)	(650,721)	(603,941)
Transition liability/(surplus)	(320,219)	(330,590)
Allocated pooled OPSRP UAL	231,469	50,500
Side account	0	0
Net unfunded pension actuarial accrued liability	2,622,961	3,834,205
Combined valuation payroll	3,284,045	2,959,716
Net pension UAL as a percentage of payroll	80%	130%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.87%)	(0.96%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$68,901	$76,673
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$665,118	$105,089	5.78%	$647,351	$37,417
Tier 2 General Service	10.58%	534,197	56,518	10.42%	500,086	52,109
Total General Service		**1,199,315**	**161,607**		**1,147,437**	**89,526**
Tier 1 Police & Fire	17.89%	77,831	13,924	15.06%	80,269	12,089
Tier 2 Police & Fire	15.70%	374,405	58,782	15.12%	342,980	51,859
Total Police & Fire		**452,236**	**72,706**		**423,249**	**63,948**
Total		**$1,651,551**	**$234,313**		**$1,570,686**	**$153,474**
Employer normal cost rate						
General Service			**13.47%**			**7.80%**
Police & Fire			**16.08%**			**15.11%**
Aggregate (Default)			**14.19%**			**9.77%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($330,590)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.08%)
B. Actual employer payroll	1,555,909
C. Payment to transition liability/(surplus)	(16,804)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.08%)
B. Actual employer payroll	1,600,739
C. Payment to transition liability/(surplus)	(17,287)
4. Supplemental payment to transition liability	0
5. Interest	(23,720)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($320,219)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(320,219)	(330,590)
2. Combined valuation payroll	3,284,045	2,959,716
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.87%)**	**(0.96%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,284,045	2,959,716
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Roseburg/2100
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Roseburg/2100

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Roseburg/2100

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Roseburg -- #2100

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Roseburg to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Roseburg.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Roseburg

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.49%	13.37%	16.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	4.22%	4.22%	4.22%	4.22%	4.22%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**22.79%**	**20.67%**	**24.19%**	**14.66%**	**18.76%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**23.35%**	**21.23%**	**24.75%**	**15.14%**	**19.24%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	20.95%	16.29%	24.12%	14.82%	17.53%
July 1, 2013 to June 30, 2015	21.00%	16.63%	23.70%	14.88%	17.61%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Roseburg

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$10,397,182	$15,794,098
Allocated pre-SLGRP pooled liability/(surplus)	(2,012,136)	(2,021,668)
Transition liability/(surplus)	4,826,043	4,892,489
Allocated pooled OPSRP UAL	715,738	169,046
Side account	0	0
Net unfunded pension actuarial accrued liability	13,926,827	18,833,965
Combined valuation payroll	10,154,797	9,907,525
Net pension UAL as a percentage of payroll	137%	190%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	4.22%	4.25%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$213,052	$256,659
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,292,450	$204,207	5.78%	$1,232,895	$71,261
Tier 2 General Service	10.58%	1,124,171	118,937	10.42%	1,148,172	119,640
Total General Service		**2,416,621**	**323,144**		**2,381,067**	**190,901**
Tier 1 Police & Fire	17.89%	1,997,124	357,285	15.06%	2,082,565	313,634
Tier 2 Police & Fire	15.70%	1,687,537	264,943	15.12%	1,788,284	270,389
Total Police & Fire		**3,684,661**	**622,228**		**3,870,849**	**584,023**
Total		**$6,101,282**	**$945,372**		**$6,251,916**	**$774,924**
Employer normal cost rate						
General Service			**13.37%**			**8.02%**
Police & Fire			**16.89%**			**15.09%**
Aggregate (Default)			**15.49%**			**12.39%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$4,892,489
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	4.21%
B. Actual employer payroll	4,993,899
C. Payment to transition liability/(surplus)	210,243
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	4.21%
B. Actual employer payroll	5,075,719
C. Payment to transition liability/(surplus)	213,688
4. Supplemental payment to transition liability	0
5. Interest	357,485
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$4,826,043**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	4,826,043	4,892,489
2. Combined valuation payroll	10,154,797	9,907,525
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**4.22%**	**4.25%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	10,154,797	9,907,525
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Rogue River/2251
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Rogue River/2251

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Rogue River/2251

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Rogue River -- #2251

December 2013

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Executive Summary

Milliman has prepared this report for City of Rogue River to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Rogue River.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Rogue River

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.44%	13.65%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	3.31%	3.31%	3.31%	3.31%	3.31%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.83%**	**20.04%**	**22.09%**	**13.75%**	**17.85%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.39%**	**20.60%**	**22.65%**	**14.23%**	**18.33%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.04%	15.89%	22.77%	13.96%	16.67%
July 1, 2013 to June 30, 2015	18.17%	15.86%	22.79%	13.94%	16.67%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Rogue River

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$704,937	$1,072,010
Allocated pre-SLGRP pooled liability/(surplus)	(136,424)	(137,219)
Transition liability/(surplus)	257,205	259,204
Allocated pooled OPSRP UAL	48,528	11,474
Side account	0	0
Net unfunded pension actuarial accrued liability	874,246	1,205,469
Combined valuation payroll	688,503	672,464
Net pension UAL as a percentage of payroll	127%	179%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	3.31%	3.32%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$14,445	$17,421
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$126,429	$19,976	5.78%	$123,579	$7,143
Tier 2 General Service	10.58%	88,546	9,368	10.42%	133,804	13,942
Total General Service		**214,975**	**29,344**		**257,383**	**21,085**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	134,917	21,182	15.12%	128,793	19,474
Total Police & Fire		**134,917**	**21,182**		**128,793**	**19,474**
Total		**$349,892**	**$50,526**		**$386,176**	**$40,559**
Employer normal cost rate						
General Service			**13.65%**			**8.19%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**14.44%**			**10.50%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$259,204
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	3.35%
B. Actual employer payroll	310,901
C. Payment to transition liability/(surplus)	10,415
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	3.35%
B. Actual employer payroll	317,462
C. Payment to transition liability/(surplus)	10,636
4. Supplemental payment to transition liability	0
5. Interest	19,052
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$257,205**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	257,205	259,204
2. Combined valuation payroll	688,503	672,464
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**3.31%**	**3.32%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	688,503	672,464
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Rockaway Beach/2203
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Rockaway Beach/2203

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Rockaway Beach/2203

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Rockaway Beach -- #2203

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Rockaway Beach to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Rockaway Beach.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Rockaway Beach

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.42%	11.42%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.70%)	(4.70%)	(4.70%)	(4.70%)	(4.70%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.56%**	**11.56%**	**16.86%**	**7.50%**	**11.60%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.12%**	**12.12%**	**17.42%**	**7.98%**	**12.08%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.21%	10.21%	17.44%	8.21%	10.92%
July 1, 2013 to June 30, 2015	11.38%	11.38%	16.82%	8.00%	10.73%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Rockaway Beach

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$659,798	$1,080,677
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(341,116)	(345,017)
Allocated pooled OPSRP UAL	45,420	11,567
Side account	0	0
Net unfunded pension actuarial accrued liability	364,102	747,227
Combined valuation payroll	644,416	677,901
Net pension UAL as a percentage of payroll	57%	110%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.70%)	(4.38%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$13,520	$17,561
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$41,329	$6,530	5.78%	$43,365	$2,506
Tier 2 General Service	10.58%	216,646	22,921	10.42%	218,541	22,772
Total General Service		**257,975**	**29,451**		**261,906**	**25,278**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$257,975**	**$29,451**		**$261,906**	**$25,278**
Employer normal cost rate						
General Service			**11.42%**			**9.65%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.42%**			**9.65%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($345,017)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.10%)
B. Actual employer payroll	350,242
C. Payment to transition liability/(surplus)	(14,360)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.10%)
B. Actual employer payroll	361,178
C. Payment to transition liability/(surplus)	(14,809)
4. Supplemental payment to transition liability	0
5. Interest	(25,268)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($341,116)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(341,116)	(345,017)
2. Combined valuation payroll	644,416	677,901
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.70%)**	**(4.38%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	644,416	677,901
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Riddle/2260
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Riddle/2260

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Riddle/2260

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Riddle -- #2260

December 2013

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Executive Summary

Milliman has prepared this report for City of Riddle to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Riddle.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Riddle

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.82%	14.82%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.17%)	(4.17%)	(4.17%)	(4.17%)	(4.17%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.49%**	**15.49%**	**17.39%**	**8.03%**	**12.13%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.05%**	**16.05%**	**17.95%**	**8.51%**	**12.61%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.42%	8.42%	17.25%	8.02%	10.73%
July 1, 2013 to June 30, 2015	8.53%	8.53%	16.93%	8.11%	10.84%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Riddle

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$262,944	$393,209
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(120,857)	(122,496)
Allocated pooled OPSRP UAL	18,101	4,209
Side account	0	0
Net unfunded pension actuarial accrued liability	160,188	274,922
Combined valuation payroll	256,814	246,657
Net pension UAL as a percentage of payroll	62%	111%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.17%)	(4.27%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,388	$6,390
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$142,152	$22,460	5.78%	$131,126	$7,579
Tier 2 General Service	10.58%	32,925	3,483	10.42%	31,945	3,329
Total General Service		**175,077**	**25,943**		**163,071**	**10,908**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$175,077**	**$25,943**		**$163,071**	**$10,908**
Employer normal cost rate						
General Service			**14.82%**			**6.69%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.82%**			**6.69%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($122,496)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.29%)
B. Actual employer payroll	123,805
C. Payment to transition liability/(surplus)	(5,311)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.29%)
B. Actual employer payroll	123,072
C. Payment to transition liability/(surplus)	(5,280)
4. Supplemental payment to transition liability	0
5. Interest	(8,952)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($120,857)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(120,857)	(122,496)
2. Combined valuation payroll	256,814	246,657
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.17%)**	**(4.27%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	256,814	246,657
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Reedsport/2139
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Reedsport/2139

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Reedsport/2139

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Reedsport -- #2139

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Reedsport to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Reedsport.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Reedsport

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.62%	12.35%	16.20%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(11.47%)	(11.47%)	(11.47%)	(11.47%)	(11.47%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**5.23%**	**3.96%**	**7.81%**	**0.00%**	**3.07%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**5.79%**	**4.52%**	**8.37%**	**0.48%**	**3.55%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	3.72%	1.84%	9.06%	0.07%	2.78%
July 1, 2013 to June 30, 2015	4.53%	2.26%	8.87%	0.03%	2.76%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Reedsport

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,392,434	$2,307,307
Allocated pre-SLGRP pooled liability/(surplus)	(269,474)	(295,339)
Transition liability/(surplus)	(1,758,655)	(1,782,057)
Allocated pooled OPSRP UAL	95,855	24,695
Side account	0	0
Net unfunded pension actuarial accrued liability	(539,840)	254,606
Combined valuation payroll	1,359,973	1,447,357
Net pension UAL as a percentage of payroll	(40%)	18%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(11.47%)	(10.59%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$28,533	$37,495
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$175,902	$27,793	5.78%	$236,703	$13,681
Tier 2 General Service	10.58%	341,819	36,164	10.42%	334,496	34,854
Total General Service		**517,721**	**63,957**		**571,199**	**48,535**
Tier 1 Police & Fire	17.89%	57,947	10,367	15.06%	57,082	8,597
Tier 2 Police & Fire	15.70%	197,856	31,063	15.12%	241,573	36,526
Total Police & Fire		**255,803**	**41,430**		**298,655**	**45,123**
Total		**$773,524**	**$105,387**		**$869,854**	**$93,658**
Employer normal cost rate						
General Service			**12.35%**			**8.50%**
Police & Fire			**16.20%**			**15.11%**
Aggregate (Default)			**13.62%**			**10.77%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,782,057)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(10.54%)
B. Actual employer payroll	756,643
C. Payment to transition liability/(surplus)	(79,750)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(10.54%)
B. Actual employer payroll	701,357
C. Payment to transition liability/(surplus)	(73,923)
4. Supplemental payment to transition liability	0
5. Interest	(130,271)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,758,655)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,758,655)	(1,782,057)
2. Combined valuation payroll	1,359,973	1,447,357
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(11.47%)**	**(10.59%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,359,973	1,447,357
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Redmond/2122
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Redmond/2122

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Redmond/2122

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Redmond -- #2122

December 2013

Secondary Employers

2590 Deschutes County Rural Fire Protection District #1

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Executive Summary

Milliman has prepared this report for City of Redmond to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Redmond.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Redmond

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.68%	12.50%	16.26%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.71%)	(5.71%)	(5.71%)	(5.71%)	(5.71%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.81%**	**11.63%**	**15.39%**	**6.49%**	**10.59%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.37%**	**12.19%**	**15.95%**	**6.97%**	**11.07%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.69%	8.68%	15.99%	6.83%	9.54%
July 1, 2013 to June 30, 2015	12.54%	10.46%	16.91%	8.08%	10.81%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Redmond

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$9,106,892	$13,908,905
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(5,721,405)	(5,785,845)
Allocated pooled OPSRP UAL	626,915	148,868
Side account	0	0
Net unfunded pension actuarial accrued liability	4,012,402	8,271,928
Combined valuation payroll	8,894,587	8,724,957
Net pension UAL as a percentage of payroll	45%	95%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.71%)	(5.70%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$186,612	$226,024
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,112,356	$175,752	5.78%	$1,229,193	$71,047
Tier 2 General Service	10.58%	1,914,222	202,525	10.42%	1,988,796	207,233
Total General Service		**3,026,578**	**378,277**		**3,217,989**	**278,280**
Tier 1 Police & Fire	17.89%	350,139	62,640	15.06%	434,849	65,488
Tier 2 Police & Fire	15.70%	1,030,408	161,774	15.12%	1,101,609	166,563
Total Police & Fire		**1,380,547**	**224,414**		**1,536,458**	**232,051**
Total		**$4,407,125**	**$602,691**		**$4,754,447**	**$510,331**
Employer normal cost rate						
General Service			**12.50%**			**8.65%**
Police & Fire			**16.26%**			**15.10%**
Aggregate (Default)			**13.68%**			**10.73%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($5,785,845)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.48%)
B. Actual employer payroll	4,392,796
C. Payment to transition liability/(surplus)	(240,725)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.48%)
B. Actual employer payroll	4,516,826
C. Payment to transition liability/(surplus)	(247,523)
4. Supplemental payment to transition liability	0
5. Interest	(423,808)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($5,721,405)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(5,721,405)	(5,785,845)
2. Combined valuation payroll	8,894,587	8,724,957
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.71%)**	**(5.70%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	8,894,587	8,724,957
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Portland/2121
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Portland/2121

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Portland/2121

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Portland -- #2121

December 2013

Secondary Employers

2156	Portland Development Commission
2173	Portland Boxing Commission
2509	Multnomah Rural Fire Protection District #2
2514	Maplewood Water District
2516	Multnomah Rural Fire Protection District #3
2520	Powell Valley Road Water District
2525	Metropolitan Planning Commission
2566	Capitol Highway Water District
2593	Sylvan Water District
2680	Gilbert Water District
2683	City of Portland Water Bureau

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Executive Summary

Milliman has prepared this report for City of Portland to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Portland.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Portland

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.38%	13.34%	16.38%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	5.27%	5.27%	5.27%	5.27%	5.27%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(4.55%)	(4.55%)	(4.55%)	(4.55%)	(4.55%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.94%**	**12.90%**	**15.94%**	**6.92%**	**11.02%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.50%**	**13.46%**	**16.50%**	**7.40%**	**11.50%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.71%	8.61%	16.45%	7.19%	9.90%
July 1, 2013 to June 30, 2015	8.75%	8.65%	15.85%	7.03%	9.76%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Portland

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$319,128,292	$483,838,011
Allocated pre-SLGRP pooled liability/(surplus)	(61,759,951)	(61,931,984)
Transition liability/(surplus)	(159,859,883)	(161,817,407)
Allocated pooled OPSRP UAL	21,968,670	5,178,569
Side account	0	0
Net unfunded pension actuarial accrued liability	119,477,128	265,267,189
Combined valuation payroll	311,688,601	303,508,135
Net pension UAL as a percentage of payroll	38%	87%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(4.55%)	(4.59%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,539,359	$7,862,531
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$95,028,276	$15,014,468	5.78%	$101,471,203	$5,865,036
Tier 2 General Service	10.58%	84,472,256	8,937,165	10.42%	84,612,862	8,816,660
Total General Service		**179,500,532**	**23,951,633**		**186,084,065**	**14,681,696**
Tier 1 Police & Fire	17.89%	698,197	124,907	15.06%	1,074,211	161,776
Tier 2 Police & Fire	15.70%	1,549,186	243,222	15.12%	1,441,628	217,974
Total Police & Fire		**2,247,383**	**368,129**		**2,515,839**	**379,750**
Total		**$181,747,915**	**$24,319,762**		**$188,599,904**	**$15,061,446**
Employer normal cost rate						
General Service			**13.34%**			**7.89%**
Police & Fire			**16.38%**			**15.09%**
Aggregate (Default)			**13.38%**			**7.99%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($161,817,407)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.34%)
B. Actual employer payroll	155,857,124
C. Payment to transition liability/(surplus)	(6,764,199)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.34%)
B. Actual employer payroll	162,092,137
C. Payment to transition liability/(surplus)	(7,034,798)
4. Supplemental payment to transition liability	0
5. Interest	(11,841,473)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($159,859,883)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(159,859,883)	(161,817,407)
2. Combined valuation payroll	311,688,601	303,508,135
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.55%)**	**(4.59%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	311,688,601	303,508,135
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Port Orford/2184
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Port Orford/2184

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Port Orford/2184

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Port Orford -- #2184

December 2013

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Executive Summary

Milliman has prepared this report for City of Port Orford to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Port Orford.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Port Orford

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.74%	12.74%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.91%)	(0.91%)	(0.91%)	(0.91%)	(0.91%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.91%**	**14.91%**	**18.89%**	**9.53%**	**13.63%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.47%**	**15.47%**	**19.45%**	**10.01%**	**14.11%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.50%	11.50%	18.83%	9.60%	12.31%
July 1, 2013 to June 30, 2015	11.94%	11.94%	18.53%	9.71%	12.44%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Port Orford

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$450,617	$710,979
Allocated pre-SLGRP pooled liability/(surplus)	(87,207)	(91,006)
Transition liability/(surplus)	(44,963)	(47,269)
Allocated pooled OPSRP UAL	31,020	7,610
Side account	0	0
Net unfunded pension actuarial accrued liability	349,467	580,314
Combined valuation payroll	440,112	445,992
Net pension UAL as a percentage of payroll	79%	130%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.91%)	(0.91%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,234	$11,554
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$112,740	$17,813	5.78%	$110,734	$6,400
Tier 2 General Service	10.58%	159,692	16,895	10.42%	156,853	16,344
Total General Service		**272,432**	**34,708**		**267,587**	**22,744**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$272,432**	**$34,708**		**$267,587**	**$22,744**
Employer normal cost rate						
General Service			**12.74%**			**8.50%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.74%**			**8.50%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($47,269)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.01%)
B. Actual employer payroll	280,027
C. Payment to transition liability/(surplus)	(2,828)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.01%)
B. Actual employer payroll	278,120
C. Payment to transition liability/(surplus)	(2,809)
4. Supplemental payment to transition liability	0
5. Interest	(3,331)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($44,963)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(44,963)	(47,269)
2. Combined valuation payroll	440,112	445,992
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.91%)**	**(0.91%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	440,112	445,992
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Pilot Rock/2161
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Pilot Rock/2161

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
City of Pilot Rock/2161

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Pilot Rock -- #2161

December 2013

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Executive Summary

Milliman has prepared this report for City of Pilot Rock to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Pilot Rock.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Pilot Rock

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.50%	13.81%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	3.41%	3.41%	3.41%	3.41%	3.41%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.99%**	**20.30%**	**22.19%**	**13.85%**	**17.95%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.55%**	**20.86%**	**22.75%**	**14.33%**	**18.43%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.07%	14.53%	22.96%	13.77%	16.48%
July 1, 2013 to June 30, 2015	18.88%	16.12%	23.69%	14.84%	17.57%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Pilot Rock

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$365,566	$477,313
Allocated pre-SLGRP pooled liability/(surplus)	(70,747)	(61,097)
Transition liability/(surplus)	137,351	138,008
Allocated pooled OPSRP UAL	25,165	5,109
Side account	0	0
Net unfunded pension actuarial accrued liability	457,335	559,333
Combined valuation payroll	357,044	299,415
Net pension UAL as a percentage of payroll	128%	187%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	3.41%	3.96%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$7,491	$7,756
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$69,066	$10,912	5.78%	$68,403	$3,954
Tier 2 General Service	10.58%	42,416	4,488	10.42%	42,312	4,409
Total General Service		**111,482**	**15,400**		**110,715**	**8,363**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	64,444	10,118	15.12%	63,528	9,605
Total Police & Fire		**64,444**	**10,118**		**63,528**	**9,605**
Total		**$175,926**	**$25,518**		**$174,243**	**$17,968**
Employer normal cost rate						
General Service			**13.81%**			**7.55%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**14.50%**			**10.31%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$138,008
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	3.16%
B. Actual employer payroll	169,313
C. Payment to transition liability/(surplus)	5,350
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	3.16%
B. Actual employer payroll	173,445
C. Payment to transition liability/(surplus)	5,481
4. Supplemental payment to transition liability	0
5. Interest	10,174
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$137,351**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	137,351	138,008
2. Combined valuation payroll	357,044	299,415
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**3.41%**	**3.96%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	357,044	299,415
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Phoenix/2249
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Phoenix/2249

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Phoenix/2249

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Phoenix -- #2249

December 2013

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Executive Summary

Milliman has prepared this report for City of Phoenix to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Phoenix.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Phoenix

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.02%	11.82%	16.42%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(10.78%)	(10.78%)	(10.78%)	(10.78%)	(10.78%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**8.08%**	**5.88%**	**10.48%**	**1.42%**	**5.52%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**8.64%**	**6.44%**	**11.04%**	**1.90%**	**6.00%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.19%	4.63%	11.36%	2.26%	4.97%
July 1, 2013 to June 30, 2015	7.93%	5.55%	11.10%	2.27%	5.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Phoenix

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,045,491	$1,691,138
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,240,380)	(1,246,360)
Allocated pooled OPSRP UAL	71,971	18,100
Side account	0	0
Net unfunded pension actuarial accrued liability	(122,918)	462,878
Combined valuation payroll	1,021,118	1,060,839
Net pension UAL as a percentage of payroll	(12%)	44%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(10.78%)	(10.11%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$21,423	$27,482
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$48,872	$7,722	5.78%	$47,656	$2,755
Tier 2 General Service	10.58%	157,291	16,641	10.42%	207,413	21,612
Total General Service		**206,163**	**24,363**		**255,069**	**24,367**
Tier 1 Police & Fire	17.89%	62,038	11,099	15.06%	58,994	8,884
Tier 2 Police & Fire	15.70%	126,967	19,934	15.12%	131,747	19,920
Total Police & Fire		**189,005**	**31,033**		**190,741**	**28,804**
Total		**$395,168**	**$55,396**		**$445,810**	**$53,171**
Employer normal cost rate						
General Service			**11.82%**			**9.55%**
Police & Fire			**16.42%**			**15.10%**
Aggregate (Default)			**14.02%**			**11.93%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,246,360)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(10.05%)
B. Actual employer payroll	471,530
C. Payment to transition liability/(surplus)	(47,389)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(10.05%)
B. Actual employer payroll	502,208
C. Payment to transition liability/(surplus)	(50,471)
4. Supplemental payment to transition liability	0
5. Interest	(91,880)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,240,380)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,240,380)	(1,246,360)
2. Combined valuation payroll	1,021,118	1,060,839
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(10.78%)**	**(10.11%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,021,118	1,060,839
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Philomath/2187
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Philomath/2187

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Philomath/2187

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

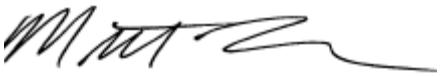
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

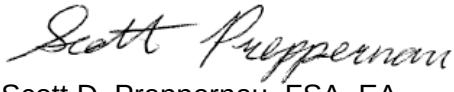
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Philomath -- #2187

December 2013

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Executive Summary

Milliman has prepared this report for City of Philomath to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Philomath.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Philomath

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.60%	13.72%	17.14%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.99%)	(2.99%)	(2.99%)	(2.99%)	(2.99%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.69%**	**13.81%**	**17.23%**	**7.45%**	**11.55%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.25%**	**14.37%**	**17.79%**	**7.93%**	**12.03%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.63%	8.89%	16.71%	7.52%	10.23%
July 1, 2013 to June 30, 2015	11.98%	9.68%	16.83%	8.01%	10.74%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Philomath

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,415,257	$2,396,036
Allocated pre-SLGRP pooled liability/(surplus)	(273,891)	(306,696)
Transition liability/(surplus)	(465,574)	(479,835)
Allocated pooled OPSRP UAL	97,426	25,645
Side account	0	0
Net unfunded pension actuarial accrued liability	773,218	1,635,150
Combined valuation payroll	1,382,264	1,503,016
Net pension UAL as a percentage of payroll	56%	109%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.99%)	(2.75%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$29,000	$38,936
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$335,060	$52,939	5.78%	$305,686	$17,669
Tier 2 General Service	10.58%	221,085	23,391	10.42%	265,253	27,639
Total General Service		**556,145**	**76,330**		**570,939**	**45,308**
Tier 1 Police & Fire	17.89%	126,198	22,577	15.06%	120,798	18,192
Tier 2 Police & Fire	15.70%	65,126	10,225	15.12%	149,844	22,656
Total Police & Fire		**191,324**	**32,802**		**270,642**	**40,848**
Total		**$747,469**	**$109,132**		**$841,581**	**$86,156**
Employer normal cost rate						
General Service			**13.72%**			**7.94%**
Police & Fire			**17.14%**			**15.09%**
Aggregate (Default)			**14.60%**			**10.24%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($479,835)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.09%)
B. Actual employer payroll	791,193
C. Payment to transition liability/(surplus)	(24,448)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.09%)
B. Actual employer payroll	786,415
C. Payment to transition liability/(surplus)	(24,300)
4. Supplemental payment to transition liability	0
5. Interest	(34,487)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($465,574)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(465,574)	(479,835)
2. Combined valuation payroll	1,382,264	1,503,016
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.99%)**	**(2.75%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,382,264	1,503,016
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Pendleton/2154
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Pendleton/2154

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Pendleton/2154

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Pendleton -- #2154

December 2013

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Executive Summary

Milliman has prepared this report for City of Pendleton to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Pendleton.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Pendleton

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.31%	13.71%	16.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(3.63%)	(3.63%)	(3.63%)	(3.63%)	(3.63%)
Net pension contribution rate	**14.76%**	**13.16%**	**16.15%**	**6.81%**	**10.91%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.32%**	**13.72%**	**16.71%**	**7.29%**	**11.39%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.20%	8.26%	16.31%	7.07%	9.78%
July 1, 2013 to June 30, 2015	12.44%	8.46%	16.03%	7.21%	9.94%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Pendleton

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$8,271,581	$12,685,049
Allocated pre-SLGRP pooled liability/(surplus)	(1,600,774)	(1,623,705)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	569,412	135,769
Side account	3,305,226	3,152,756
Net unfunded pension actuarial accrued liability	3,934,993	8,044,357
Combined valuation payroll	8,078,749	7,957,241
Net pension UAL as a percentage of payroll	49%	101%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	(3.63%)	(3.41%)
Allocated pooled RHIA UAL	$169,496	$206,136
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,500,612	$237,097	5.78%	$1,666,535	$96,326
Tier 2 General Service	10.58%	1,003,040	106,122	10.42%	1,002,606	104,472
Total General Service		**2,503,652**	**343,219**		**2,669,141**	**200,798**
Tier 1 Police & Fire	17.89%	1,315,092	235,270	15.06%	1,322,456	199,162
Tier 2 Police & Fire	15.70%	1,550,807	243,477	15.12%	1,625,765	245,816
Total Police & Fire		**2,865,899**	**478,747**		**2,948,221**	**444,978**
Total		**$5,369,551**	**$821,966**		**$5,617,362**	**$645,776**
Employer normal cost rate						
General Service			**13.71%**			**7.52%**
Police & Fire			**16.70%**			**15.09%**
Aggregate (Default)			**15.31%**			**11.50%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	8,078,749	7,957,241
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$3,152,756**	**$3,152,756**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(291,314)	(291,314)
5. Side account earnings during 2012		444,783	444,783
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$3,305,226**	**$3,305,226**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$3,305,226	$3,152,756
Side Account 2	0	0
Side Account 3	0	0
Total	**$3,305,226**	**$3,152,756**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$3,305,226	$3,152,756
2. Combined valuation payroll	8,078,749	7,957,241
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(3.63%)	(3.41%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Oregon City/2119
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Oregon City/2119

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Oregon City/2119

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Oregon City -- #2119

December 2013

Secondary Employers

2727 Park Place Water District

2769 South Fork Water Board

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Executive Summary

Milliman has prepared this report for City of Oregon City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Oregon City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Oregon City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.46%	12.34%	16.33%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(5.18%)	(5.18%)	(5.18%)	(5.18%)	(5.18%)
Net pension contribution rate	**13.12%**	**12.00%**	**15.99%**	**7.02%**	**11.12%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.68%**	**12.56%**	**16.55%**	**7.50%**	**11.60%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.95%	8.99%	15.95%	6.84%	9.55%
July 1, 2013 to June 30, 2015	11.92%	10.12%	16.38%	7.55%	10.28%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Oregon City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$11,049,600	$17,189,677
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	760,650	183,983
Side account	6,306,038	6,051,253
Net unfunded pension actuarial accrued liability	5,504,212	11,322,407
Combined valuation payroll	10,792,006	10,782,962
Net pension UAL as a percentage of payroll	51%	105%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.00%	0.00%
Side account rate relief	(5.18%)	(4.83%)
Allocated pooled RHIA UAL	$226,421	$279,338
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,679,603	$265,377	5.78%	$1,780,988	$102,941
Tier 2 General Service	10.58%	3,311,357	350,342	10.42%	3,452,470	359,747
Total General Service		**4,990,960**	**615,719**		**5,233,458**	**462,688**
Tier 1 Police & Fire	17.89%	562,680	100,663	15.06%	772,677	116,365
Tier 2 Police & Fire	15.70%	1,384,744	217,405	15.12%	1,338,593	202,395
Total Police & Fire		**1,947,424**	**318,068**		**2,111,270**	**318,760**
Total		**$6,938,384**	**$933,787**		**$7,344,728**	**$781,448**
Employer normal cost rate						
General Service			**12.34%**			**8.84%**
Police & Fire			**16.33%**			**15.10%**
Aggregate (Default)			**13.46%**			**10.64%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	10,792,006	10,782,962
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$6,051,253**	**$6,051,253**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(591,327)	(591,327)
5. Side account earnings during 2012		847,113	847,113
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$6,306,038**	**$6,306,038**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$6,306,038	$6,051,253
Side Account 2	0	0
Side Account 3	0	0
Total	**$6,306,038**	**$6,051,253**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$6,306,038	$6,051,253
2. Combined valuation payroll	10,792,006	10,782,962
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(5.18%)	(4.83%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Portland, OR 97204-3654
503 227 0634

December 2013

City of Oakridge/2168
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Oakridge/2168

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Oakridge/2168

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Oakridge -- #2168

December 2013

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Executive Summary

Milliman has prepared this report for City of Oakridge to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Oakridge.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Oakridge

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.06%	11.87%	17.39%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	5.74%	5.74%	5.74%	5.74%	5.74%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**23.88%**	**20.69%**	**26.21%**	**16.18%**	**20.28%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**24.44%**	**21.25%**	**26.77%**	**16.66%**	**20.76%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	19.22%	16.33%	23.93%	14.43%	17.14%
July 1, 2013 to June 30, 2015	19.49%	16.57%	23.62%	14.82%	17.55%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Oakridge

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$949,931	$2,004,161
Allocated pre-SLGRP pooled liability/(surplus)	(183,837)	(256,536)
Transition liability/(surplus)	600,717	596,397
Allocated pooled OPSRP UAL	65,393	21,451
Side account	0	0
Net unfunded pension actuarial accrued liability	1,432,204	2,365,473
Combined valuation payroll	927,786	1,257,196
Net pension UAL as a percentage of payroll	154%	188%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	5.74%	4.08%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,465	$32,568
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$50,862	$8,036	5.78%	$209,156	$12,089
Tier 2 General Service	10.58%	154,643	16,361	10.42%	195,972	20,420
Total General Service		**205,505**	**24,397**		**405,128**	**32,509**
Tier 1 Police & Fire	17.89%	216,951	38,813	15.06%	221,516	33,360
Tier 2 Police & Fire	15.70%	64,147	10,071	15.12%	64,249	9,714
Total Police & Fire		**281,098**	**48,884**		**285,765**	**43,074**
Total		**$486,603**	**$73,281**		**$690,893**	**$75,583**
Employer normal cost rate						
General Service			**11.87%**			**8.02%**
Police & Fire			**17.39%**			**15.07%**
Aggregate (Default)			**15.06%**			**10.94%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$596,397
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	3.82%
B. Actual employer payroll	529,378
C. Payment to transition liability/(surplus)	20,222
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	3.82%
B. Actual employer payroll	522,425
C. Payment to transition liability/(surplus)	19,956
4. Supplemental payment to transition liability	0
5. Interest	44,498
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$600,717**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	600,717	596,397
2. Combined valuation payroll	927,786	1,257,196
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**5.74%**	**4.08%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	927,786	1,257,196
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Oakland/2143
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Oakland/2143

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Oakland/2143

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Oakland -- #2143

December 2013

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Executive Summary

Milliman has prepared this report for City of Oakland to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Oakland.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Oakland

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	5.68%	5.68%	5.68%	5.68%	5.68%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.10%**	**21.10%**	**27.24%**	**17.88%**	**21.98%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.66%**	**21.66%**	**27.80%**	**18.36%**	**22.46%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	22.08%	22.08%	27.56%	18.33%	21.04%
July 1, 2013 to June 30, 2015	21.19%	19.96%	27.13%	18.31%	21.04%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Oakland

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$193,373	$336,910
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	120,823	124,383
Allocated pooled OPSRP UAL	13,312	3,606
Side account	0	0
Net unfunded pension actuarial accrued liability	327,508	464,899
Combined valuation payroll	188,865	211,341
Net pension UAL as a percentage of payroll	173%	220%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	5.68%	5.06%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,962	$5,475
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	4,198	444	10.42%	0	0
Total General Service		**4,198**	**444**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$4,198**	**$444**		**$0**	**$0**
Employer normal cost rate						
General Service			**10.58%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$124,383
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	6.02%
B. Actual employer payroll	102,978
C. Payment to transition liability/(surplus)	6,199
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	6.02%
B. Actual employer payroll	104,814
C. Payment to transition liability/(surplus)	6,311
4. Supplemental payment to transition liability	0
5. Interest	8,950
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$120,823**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	120,823	124,383
2. Combined valuation payroll	188,865	211,341
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**5.68%**	**5.06%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	188,865	211,341
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Nyssa/2166
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Nyssa/2166

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Nyssa/2166

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Nyssa -- #2166

December 2013

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Executive Summary

Milliman has prepared this report for City of Nyssa to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Nyssa.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Nyssa

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.33%	13.34%	17.30%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.53%)	(0.53%)	(0.53%)	(0.53%)	(0.53%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.88%**	**15.89%**	**19.85%**	**9.91%**	**14.01%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.44%**	**16.45%**	**20.41%**	**10.39%**	**14.49%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.94%	11.80%	19.18%	10.13%	12.84%
July 1, 2013 to June 30, 2015	14.90%	12.33%	19.08%	10.25%	12.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Nyssa

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$690,279	$1,032,462
Allocated pre-SLGRP pooled liability/(surplus)	(133,588)	(132,157)
Transition liability/(surplus)	(39,929)	(39,758)
Allocated pooled OPSRP UAL	47,519	11,051
Side account	0	0
Net unfunded pension actuarial accrued liability	564,281	871,598
Combined valuation payroll	674,187	647,656
Net pension UAL as a percentage of payroll	84%	135%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.53%)	(0.53%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$14,145	$16,778
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$104,590	$16,525	5.78%	$97,309	$5,624
Tier 2 General Service	10.58%	93,294	9,871	10.42%	120,384	12,544
Total General Service		**197,884**	**26,396**		**217,693**	**18,168**
Tier 1 Police & Fire	17.89%	146,636	26,233	15.06%	47,056	7,087
Tier 2 Police & Fire	15.70%	53,962	8,472	15.12%	87,273	13,196
Total Police & Fire		**200,598**	**34,705**		**134,329**	**20,283**
Total		**$398,482**	**$61,101**		**$352,022**	**$38,451**
Employer normal cost rate						
General Service			**13.34%**			**8.35%**
Police & Fire			**17.30%**			**15.10%**
Aggregate (Default)			**15.33%**			**10.92%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($39,758)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.48%)
B. Actual employer payroll	283,002
C. Payment to transition liability/(surplus)	(1,358)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.48%)
B. Actual employer payroll	297,838
C. Payment to transition liability/(surplus)	(1,429)
4. Supplemental payment to transition liability	0
5. Interest	(2,958)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($39,929)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(39,929)	(39,758)
2. Combined valuation payroll	674,187	647,656
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.53%)**	**(0.53%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	674,187	647,656
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of North Powder/2308
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of North Powder/2308

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of North Powder/2308

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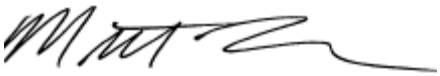
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The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

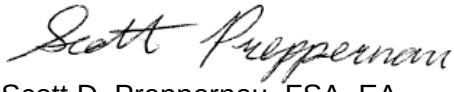
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of North Powder -- #2308

December 2013

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Executive Summary

Milliman has prepared this report for City of North Powder to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of North Powder.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of North Powder

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.76%)	(3.76%)	(3.76%)	(3.76%)	(3.76%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.66%**	**11.66%**	**17.80%**	**8.44%**	**12.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.22%**	**12.22%**	**18.36%**	**8.92%**	**13.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.61%	10.61%	16.08%	6.85%	9.56%
July 1, 2013 to June 30, 2015	12.57%	12.57%	17.24%	8.42%	11.15%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of North Powder

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$54,707	$84,900
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(22,668)	(24,511)
Allocated pooled OPSRP UAL	3,766	909
Side account	0	0
Net unfunded pension actuarial accrued liability	35,805	61,298
Combined valuation payroll	53,432	53,257
Net pension UAL as a percentage of payroll	67%	115%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.76%)	(3.96%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,121	$1,380
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	31,354	3,317	10.42%	31,636	3,296
Total General Service		**31,354**	**3,317**		**31,636**	**3,296**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$31,354**	**$3,317**		**$31,636**	**$3,296**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($24,511)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.46%)
B. Actual employer payroll	32,353
C. Payment to transition liability/(surplus)	(1,766)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.46%)
B. Actual employer payroll	32,154
C. Payment to transition liability/(surplus)	(1,756)
4. Supplemental payment to transition liability	0
5. Interest	(1,679)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($22,668)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(22,668)	(24,511)
2. Combined valuation payroll	53,432	53,257
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.76%)**	**(3.96%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	53,432	53,257
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of North Plains/2192
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of North Plains/2192

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of North Plains/2192

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of North Plains -- #2192

December 2013

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Executive Summary

Milliman has prepared this report for City of North Plains to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of North Plains.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of North Plains

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.08%	10.58%	16.68%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.41%)	(2.41%)	(2.41%)	(2.41%)	(2.41%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.75%**	**11.25%**	**17.35%**	**8.03%**	**12.13%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.31%**	**11.81%**	**17.91%**	**8.51%**	**12.61%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.27%	10.18%	18.09%	8.44%	11.15%
July 1, 2013 to June 30, 2015	14.01%	12.07%	16.74%	7.92%	10.65%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of North Plains

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$654,028	$885,349
Allocated pre-SLGRP pooled liability/(surplus)	(126,572)	(113,326)
Transition liability/(surplus)	(173,828)	(174,561)
Allocated pooled OPSRP UAL	45,023	9,476
Side account	0	0
Net unfunded pension actuarial accrued liability	398,651	606,938
Combined valuation payroll	638,781	555,373
Net pension UAL as a percentage of payroll	62%	109%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.41%)	(2.70%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$13,402	$14,387
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	191,492	20,260	10.42%	197,127	20,541
Total General Service		**191,492**	**20,260**		**197,127**	**20,541**
Tier 1 Police & Fire	17.89%	59,811	10,700	15.06%	62,424	9,401
Tier 2 Police & Fire	15.70%	73,359	11,517	15.12%	76,988	11,641
Total Police & Fire		**133,170**	**22,217**		**139,412**	**21,042**
Total		**$324,662**	**$42,477**		**$336,539**	**$41,583**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.68%**			**15.09%**
Aggregate (Default)			**13.08%**			**12.36%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($174,561)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.17%)
B. Actual employer payroll	310,632
C. Payment to transition liability/(surplus)	(6,741)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.17%)
B. Actual employer payroll	316,519
C. Payment to transition liability/(surplus)	(6,868)
4. Supplemental payment to transition liability	0
5. Interest	(12,876)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($173,828)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(173,828)	(174,561)
2. Combined valuation payroll	638,781	555,373
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.41%)**	**(2.70%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	638,781	555,373
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of North Bend/2292
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of North Bend/2292

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of North Bend/2292

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of North Bend -- #2292

December 2013

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Executive Summary

Milliman has prepared this report for City of North Bend to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of North Bend.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of North Bend

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.82%	13.09%	16.62%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.51%)	(2.51%)	(2.51%)	(2.51%)	(2.51%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.39%**	**13.66%**	**17.19%**	**7.93%**	**12.03%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.95%**	**14.22%**	**17.75%**	**8.41%**	**12.51%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.56%	9.89%	17.33%	8.19%	10.90%
July 1, 2013 to June 30, 2015	13.35%	9.65%	16.89%	8.06%	10.79%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of North Bend

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,749,172	$5,445,568
Allocated pre-SLGRP pooled liability/(surplus)	(725,566)	(697,041)
Transition liability/(surplus)	(1,037,682)	(1,049,905)
Allocated pooled OPSRP UAL	258,092	58,284
Side account	0	0
Net unfunded pension actuarial accrued liability	2,244,016	3,756,906
Combined valuation payroll	3,661,769	3,415,966
Net pension UAL as a percentage of payroll	61%	110%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.51%)	(2.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$76,825	$88,492
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$566,445	$89,498	5.78%	$623,103	$36,015
Tier 2 General Service	10.58%	613,221	64,879	10.42%	506,936	52,823
Total General Service		**1,179,666**	**154,377**		**1,130,039**	**88,838**
Tier 1 Police & Fire	17.89%	477,035	85,342	15.06%	463,682	69,831
Tier 2 Police & Fire	15.70%	654,880	102,816	15.12%	719,483	108,786
Total Police & Fire		**1,131,915**	**188,158**		**1,183,165**	**178,617**
Total		**$2,311,581**	**$342,535**		**$2,313,204**	**$267,455**
Employer normal cost rate						
General Service			**13.09%**			**7.86%**
Police & Fire			**16.62%**			**15.10%**
Aggregate (Default)			**14.82%**			**11.56%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,049,905)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.42%)
B. Actual employer payroll	1,800,219
C. Payment to transition liability/(surplus)	(43,565)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.42%)
B. Actual employer payroll	1,881,094
C. Payment to transition liability/(surplus)	(45,523)
4. Supplemental payment to transition liability	0
5. Interest	(76,865)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,037,682)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,037,682)	(1,049,905)
2. Combined valuation payroll	3,661,769	3,415,966
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.51%)**	**(2.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,661,769	3,415,966
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Newport/2276
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Newport/2276

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Newport/2276

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Newport -- #2276

December 2013

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Executive Summary

Milliman has prepared this report for City of Newport to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Newport.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Newport

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.95%	13.34%	16.95%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(6.38%)	(6.38%)	(6.38%)	(6.38%)	(6.38%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.65%**	**10.04%**	**13.65%**	**4.06%**	**8.16%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.21%**	**10.60%**	**14.21%**	**4.54%**	**8.64%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.28%	5.43%	13.28%	3.98%	6.69%
July 1, 2013 to June 30, 2015	12.48%	5.31%	12.48%	3.66%	6.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Newport

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,110,615	$2,775,802
Allocated pre-SLGRP pooled liability/(surplus)	(408,461)	(355,307)
Transition liability/(surplus)	(1,483,610)	(1,505,967)
Allocated pooled OPSRP UAL	145,294	29,710
Side account	0	0
Net unfunded pension actuarial accrued liability	363,838	944,238
Combined valuation payroll	2,061,411	1,741,241
Net pension UAL as a percentage of payroll	18%	54%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(6.38%)	(7.44%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$43,249	$45,108
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	695,487	124,423	15.06%	677,203	101,987
Tier 2 Police & Fire	15.70%	524,188	82,298	15.12%	495,348	74,897
Total Police & Fire		**1,219,675**	**206,721**		**1,172,551**	**176,884**
Total		**$1,219,675**	**$206,721**		**$1,172,551**	**$176,884**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.95%**			**15.09%**
Aggregate (Default)			**16.95%**			**15.09%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,505,967)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.63%)
B. Actual employer payroll	981,104
C. Payment to transition liability/(surplus)	(65,047)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.63%)
B. Actual employer payroll	1,013,676
C. Payment to transition liability/(surplus)	(67,207)
4. Supplemental payment to transition liability	0
5. Interest	(109,897)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,483,610)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,483,610)	(1,505,967)
2. Combined valuation payroll	2,061,411	1,741,241
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.38%)**	**(7.44%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,061,411	1,741,241
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Newberg/2777
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Newberg/2777

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Newberg/2777

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Newberg -- #2777

December 2013

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Executive Summary

Milliman has prepared this report for City of Newberg to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Newberg.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Newberg

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.30%	12.12%	16.55%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.60%)	(0.60%)	(0.60%)	(0.60%)	(0.60%)
Side account rate relief [2]	(3.19%)	(3.19%)	(3.19%)	(3.19%)	(3.19%)
Net pension contribution rate	**14.59%**	**11.41%**	**15.84%**	**6.65%**	**10.75%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.15%**	**11.97%**	**16.40%**	**7.13%**	**11.23%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.16%	9.58%	16.05%	6.85%	9.56%
July 1, 2013 to June 30, 2015	14.32%	10.10%	16.07%	7.24%	9.97%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Newberg

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$6,284,337	$9,557,088
Allocated pre-SLGRP pooled liability/(surplus)	(1,216,189)	(1,223,321)
Transition liability/(surplus)	(413,746)	(419,146)
Allocated pooled OPSRP UAL	432,611	102,291
Side account	2,208,786	2,098,652
Net unfunded pension actuarial accrued liability	2,878,227	5,918,260
Combined valuation payroll	6,137,833	5,995,093
Net pension UAL as a percentage of payroll	47%	99%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.60%)	(0.60%)
Side account rate relief	(3.19%)	(3.01%)
Allocated pooled RHIA UAL	$128,774	$155,306
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$308,047	$48,671	5.78%	$303,703	$17,554
Tier 2 General Service	10.58%	735,659	77,833	10.42%	789,017	82,216
Total General Service		**1,043,706**	**126,504**		**1,092,720**	**99,770**
Tier 1 Police & Fire	17.89%	1,029,730	184,219	15.06%	1,032,981	155,567
Tier 2 Police & Fire	15.70%	1,630,167	255,936	15.12%	1,612,346	243,787
Total Police & Fire		**2,659,897**	**440,155**		**2,645,327**	**399,354**
Total		**$3,703,603**	**$566,659**		**$3,738,047**	**$499,124**
Employer normal cost rate						
General Service			**12.12%**			**9.13%**
Police & Fire			**16.55%**			**15.10%**
Aggregate (Default)			**15.30%**			**13.35%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($419,146)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.60%)
B. Actual employer payroll	2,920,446
C. Payment to transition liability/(surplus)	(17,523)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.60%)
B. Actual employer payroll	3,087,563
C. Payment to transition liability/(surplus)	(18,525)
4. Supplemental payment to transition liability	0
5. Interest	(30,648)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($413,746)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(413,746)	(419,146)
2. Combined valuation payroll	6,137,833	5,995,093
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.60%)**	**(0.60%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$2,098,652**	**$2,098,652**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(184,273)	(184,273)
5. Side account earnings during 2012		295,407	295,407
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$2,208,786**	**$2,208,786**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$2,208,786	$2,098,652
Side Account 2	0	0
Side Account 3	0	0
Total	**$2,208,786**	**$2,098,652**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$2,208,786	$2,098,652
2. Combined valuation payroll	6,137,833	5,995,093
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(3.19%)	(3.01%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Myrtle Point/2183
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Myrtle Point/2183

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Myrtle Point/2183

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Myrtle Point -- #2183

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Myrtle Point to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Myrtle Point.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Myrtle Point

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.74%	13.88%	16.37%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(7.89%)	(7.89%)	(7.89%)	(7.89%)	(7.89%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.93%**	**9.07%**	**11.56%**	**2.55%**	**6.65%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.49%**	**9.63%**	**12.12%**	**3.03%**	**7.13%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.30%	3.66%	11.85%	2.79%	5.50%
July 1, 2013 to June 30, 2015	6.84%	4.14%	11.82%	2.99%	5.72%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Myrtle Point

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,055,492	$1,677,824
Allocated pre-SLGRP pooled liability/(surplus)	(204,266)	(214,764)
Transition liability/(surplus)	(916,338)	(933,803)
Allocated pooled OPSRP UAL	72,660	17,958
Side account	0	0
Net unfunded pension actuarial accrued liability	7,548	547,215
Combined valuation payroll	1,030,886	1,052,487
Net pension UAL as a percentage of payroll	1%	52%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(7.89%)	(7.63%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$21,628	$27,265
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$233,252	$36,854	5.78%	$227,168	$13,130
Tier 2 General Service	10.58%	136,123	14,402	10.42%	123,832	12,903
Total General Service		**369,375**	**51,256**		**351,000**	**26,033**
Tier 1 Police & Fire	17.89%	60,123	10,756	15.06%	59,177	8,912
Tier 2 Police & Fire	15.70%	135,930	21,341	15.12%	131,385	19,865
Total Police & Fire		**196,053**	**32,097**		**190,562**	**28,777**
Total		**$565,428**	**$83,353**		**$541,562**	**$54,810**
Employer normal cost rate						
General Service			**13.88%**			**7.42%**
Police & Fire			**16.37%**			**15.10%**
Aggregate (Default)			**14.74%**			**10.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($933,803)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.82%)
B. Actual employer payroll	556,305
C. Payment to transition liability/(surplus)	(43,503)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.82%)
B. Actual employer payroll	535,021
C. Payment to transition liability/(surplus)	(41,839)
4. Supplemental payment to transition liability	0
5. Interest	(67,877)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($916,338)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(916,338)	(933,803)
2. Combined valuation payroll	1,030,886	1,052,487
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(7.89%)**	**(7.63%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,030,886	1,052,487
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Myrtle Creek/2197
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Myrtle Creek/2197

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Myrtle Creek/2197

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Myrtle Creek -- #2197

December 2013

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Executive Summary

Milliman has prepared this report for City of Myrtle Creek to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Myrtle Creek.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Myrtle Creek

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.66%	13.66%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(4.02%)	(4.02%)	(4.02%)	(4.02%)	(4.02%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.72%**	**12.72%**	**16.95%**	**6.42%**	**10.52%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.28%**	**13.28%**	**17.51%**	**6.90%**	**11.00%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.89%	7.97%	16.53%	7.10%	9.81%
July 1, 2013 to June 30, 2015	10.77%	9.16%	16.39%	7.60%	10.33%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Myrtle Creek

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$938,905	$1,579,163
Allocated pre-SLGRP pooled liability/(surplus)	(181,704)	(202,135)
Transition liability/(surplus)	(415,930)	(418,869)
Allocated pooled OPSRP UAL	64,634	16,902
Side account	0	0
Net unfunded pension actuarial accrued liability	405,905	975,061
Combined valuation payroll	917,017	990,598
Net pension UAL as a percentage of payroll	44%	98%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(4.02%)	(3.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,239	$25,662
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$233,889	$36,954	5.78%	$231,284	$13,368
Tier 2 General Service	10.58%	162,614	17,205	10.42%	182,893	19,057
Total General Service		**396,503**	**54,159**		**414,177**	**32,425**
Tier 1 Police & Fire	17.89%	122,559	21,926	15.06%	119,213	17,953
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**122,559**	**21,926**		**119,213**	**17,953**
Total		**$519,062**	**$76,085**		**$533,390**	**$50,378**
Employer normal cost rate						
General Service			**13.66%**			**7.83%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**14.66%**			**9.44%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($418,869)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.51%)
B. Actual employer payroll	486,561
C. Payment to transition liability/(surplus)	(17,078)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.51%)
B. Actual employer payroll	474,960
C. Payment to transition liability/(surplus)	(16,671)
4. Supplemental payment to transition liability	0
5. Interest	(30,810)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($415,930)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(415,930)	(418,869)
2. Combined valuation payroll	917,017	990,598
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.02%)**	**(3.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	917,017	990,598
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Mt. Vernon/2302
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Mt. Vernon/2302

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Mt. Vernon/2302

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Mt Vernon -- #2302

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Mt. Vernon to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Mt. Vernon.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Mt. Vernon

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.13%	14.13%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(7.62%)	(7.62%)	(7.62%)	(7.62%)	(7.62%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.35%**	**11.35%**	**13.94%**	**4.58%**	**8.68%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.91%**	**11.91%**	**14.50%**	**5.06%**	**9.16%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.50%	6.50%	14.49%	5.26%	7.97%
July 1, 2013 to June 30, 2015	5.93%	5.93%	13.75%	4.93%	7.66%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Mt. Vernon

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$123,210	$185,387
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(103,378)	(103,904)
Allocated pooled OPSRP UAL	8,482	1,984
Side account	0	0
Net unfunded pension actuarial accrued liability	28,314	83,467
Combined valuation payroll	120,338	116,292
Net pension UAL as a percentage of payroll	24%	72%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(7.62%)	(7.69%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,525	$3,013
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$61,036	$9,644	5.78%	$58,316	$3,371
Tier 2 General Service	10.58%	28,617	3,028	10.42%	27,635	2,880
Total General Service		**89,653**	**12,672**		**85,951**	**6,251**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$89,653**	**$12,672**		**$85,951**	**$6,251**
Employer normal cost rate						
General Service			**14.13%**			**7.27%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.13%**			**7.27%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($103,904)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.05%)
B. Actual employer payroll	56,679
C. Payment to transition liability/(surplus)	(3,996)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.05%)
B. Actual employer payroll	59,408
C. Payment to transition liability/(surplus)	(4,188)
4. Supplemental payment to transition liability	0
5. Interest	(7,658)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($103,378)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(103,378)	(103,904)
2. Combined valuation payroll	120,338	116,292
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(7.62%)**	**(7.69%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	120,338	116,292
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Moro/2301
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Moro/2301

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Moro/2301

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Moro -- #2301

December 2013

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Executive Summary

Milliman has prepared this report for City of Moro to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Moro.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Moro

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.57%)	(9.57%)	(9.57%)	(9.57%)	(9.57%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.07%**	**11.07%**	**11.99%**	**2.63%**	**6.73%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.63%**	**11.63%**	**12.55%**	**3.11%**	**7.21%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	1.81%	1.81%	11.37%	2.14%	4.85%
July 1, 2013 to June 30, 2015	2.73%	2.73%	12.04%	3.22%	5.95%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Moro

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$88,646	$139,563
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(93,410)	(94,900)
Allocated pooled OPSRP UAL	6,102	1,494
Side account	0	0
Net unfunded pension actuarial accrued liability	1,338	46,157
Combined valuation payroll	86,579	87,547
Net pension UAL as a percentage of payroll	2%	53%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.57%)	(9.32%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,816	$2,268
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$35,199	$5,561	5.78%	$35,544	$2,054
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**35,199**	**5,561**		**35,544**	**2,054**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$35,199**	**$5,561**		**$35,544**	**$2,054**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($94,900)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(10.17%)
B. Actual employer payroll	40,785
C. Payment to transition liability/(surplus)	(4,148)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(10.17%)
B. Actual employer payroll	41,900
C. Payment to transition liability/(surplus)	(4,261)
4. Supplemental payment to transition liability	0
5. Interest	(6,919)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($93,410)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(93,410)	(94,900)
2. Combined valuation payroll	86,579	87,547
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.57%)**	**(9.32%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	86,579	87,547
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Monroe/2209
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Monroe/2209

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Monroe/2209

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Monroe -- #2209

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Monroe to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Monroe.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Monroe

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(21.79%)	(21.79%)	(21.79%)	(21.79%)	(21.79%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Monroe

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$64,293	$58,998
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(154,208)	(156,893)
Allocated pooled OPSRP UAL	4,426	631
Side account	0	0
Net unfunded pension actuarial accrued liability	(85,489)	(97,264)
Combined valuation payroll	62,794	37,009
Net pension UAL as a percentage of payroll	(136%)	(263%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(21.79%)	(36.46%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,317	$959
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	26,389	2,792	10.42%	0	0
Total General Service		**26,389**	**2,792**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$26,389**	**$2,792**		**$0**	**$0**
Employer normal cost rate						
General Service			**10.58%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($156,893)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(15.07%)
B. Actual employer payroll	51,554
C. Payment to transition liability/(surplus)	(7,292)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(15.07%)
B. Actual employer payroll	48,399
C. Payment to transition liability/(surplus)	(6,816)
4. Supplemental payment to transition liability	0
5. Interest	(11,423)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($154,208)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(154,208)	(156,893)
2. Combined valuation payroll	62,794	37,009
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(21.79%)**	**(36.46%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	62,794	37,009
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Monmouth/2157
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Monmouth/2157

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Monmouth/2157

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Monmouth -- #2157

December 2013

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Executive Summary

Milliman has prepared this report for City of Monmouth to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Monmouth.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Monmouth

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.31%	13.50%	17.41%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(4.73%)	(4.73%)	(4.73%)	(4.73%)	(4.73%)
Net pension contribution rate	**14.42%**	**13.61%**	**17.52%**	**7.47%**	**11.57%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.98%**	**14.17%**	**18.08%**	**7.95%**	**12.05%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.12%	9.47%	17.24%	7.75%	10.46%
July 1, 2013 to June 30, 2015	11.13%	9.32%	16.73%	7.93%	10.66%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Monmouth

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,040,519	$4,450,840
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	209,308	47,638
Side account	1,582,089	1,500,141
Net unfunded pension actuarial accrued liability	1,667,738	2,998,337
Combined valuation payroll	2,969,637	2,791,980
Net pension UAL as a percentage of payroll	56%	107%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.00%	0.00%
Side account rate relief	(4.73%)	(4.62%)
Allocated pooled RHIA UAL	$62,304	$72,328
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$650,187	$102,730	5.78%	$613,496	$35,460
Tier 2 General Service	10.58%	512,894	54,264	10.42%	416,668	43,417
Total General Service		**1,163,081**	**156,994**		**1,030,164**	**78,877**
Tier 1 Police & Fire	17.89%	237,160	42,428	15.06%	264,976	39,905
Tier 2 Police & Fire	15.70%	66,340	10,415	15.12%	67,345	10,183
Total Police & Fire		**303,500**	**52,843**		**332,321**	**50,088**
Total		**$1,466,581**	**$209,837**		**$1,362,485**	**$128,965**
Employer normal cost rate						
General Service			**13.50%**			**7.66%**
Police & Fire			**17.41%**			**15.07%**
Aggregate (Default)			**14.31%**			**9.47%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	2,969,637	2,791,980
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$1,500,141**	**$1,500,141**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(128,882)	(128,882)
5. Side account earnings during 2012		211,830	211,830
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$1,582,089**	**$1,582,089**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$1,582,089	$1,500,141
Side Account 2	0	0
Side Account 3	0	0
Total	**$1,582,089**	**$1,500,141**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$1,582,089	$1,500,141
2. Combined valuation payroll	2,969,637	2,791,980
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(4.73%)	(4.62%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Milwaukie/2163
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Milwaukie/2163

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Milwaukie/2163

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Milwaukie -- #2163

December 2013

Secondary Employers

2560 Wichita Water District

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Milwaukie to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Milwaukie.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Milwaukie

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.77%	12.91%	16.97%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.79%)	(0.79%)	(0.79%)	(0.79%)	(0.79%)
Side account rate relief [2]	(3.31%)	(3.31%)	(3.31%)	(3.31%)	(3.31%)
Net pension contribution rate	**13.75%**	**11.89%**	**15.95%**	**6.34%**	**10.44%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.31%**	**12.45%**	**16.51%**	**6.82%**	**10.92%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.16%	8.28%	16.01%	6.73%	9.44%
July 1, 2013 to June 30, 2015	11.69%	8.81%	15.55%	6.73%	9.46%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Milwaukie

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$8,861,265	$13,560,400
Allocated pre-SLGRP pooled liability/(surplus)	(1,714,894)	(1,735,751)
Transition liability/(surplus)	(771,978)	(783,738)
Allocated pooled OPSRP UAL	610,006	145,138
Side account	3,227,269	3,063,311
Net unfunded pension actuarial accrued liability	3,757,130	8,122,738
Combined valuation payroll	8,654,686	8,506,342
Net pension UAL as a percentage of payroll	43%	95%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.79%)	(0.79%)
Side account rate relief	(3.31%)	(3.10%)
Allocated pooled RHIA UAL	$181,579	$220,361
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,167,768	$184,507	5.78%	$1,309,219	$75,673
Tier 2 General Service	10.58%	1,444,409	152,818	10.42%	1,625,046	169,330
Total General Service		**2,612,177**	**337,325**		**2,934,265**	**245,003**
Tier 1 Police & Fire	17.89%	1,273,404	227,812	15.06%	1,269,374	191,168
Tier 2 Police & Fire	15.70%	923,686	145,019	15.12%	929,299	140,510
Total Police & Fire		**2,197,090**	**372,831**		**2,198,673**	**331,678**
Total		**$4,809,267**	**$710,156**		**$5,132,938**	**$576,681**
Employer normal cost rate						
General Service			**12.91%**			**8.35%**
Police & Fire			**16.97%**			**15.09%**
Aggregate (Default)			**14.77%**			**11.23%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($783,738)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.76%)
B. Actual employer payroll	4,421,305
C. Payment to transition liability/(surplus)	(33,602)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.76%)
B. Actual employer payroll	4,650,323
C. Payment to transition liability/(surplus)	(35,342)
4. Supplemental payment to transition liability	0
5. Interest	(57,184)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($771,978)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(771,978)	(783,738)
2. Combined valuation payroll	8,654,686	8,506,342
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.79%)**	**(0.79%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$3,063,311**	**$3,063,311**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(267,343)	(267,343)
5. Side account earnings during 2012		432,300	432,300
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$3,227,269**	**$3,227,269**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$3,227,269	$3,063,311
Side Account 2	0	0
Side Account 3	0	0
Total	**$3,227,269**	**$3,063,311**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$3,227,269	$3,063,311
2. Combined valuation payroll	8,654,686	8,506,342
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(3.31%)	(3.10%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Milton-Freewater/2158
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Milton-Freewater/2158

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Milton-Freewater/2158

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Milton-Freewater -- #2158

December 2013

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Executive Summary

Milliman has prepared this report for City of Milton-Freewater to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Milton-Freewater.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Milton-Freewater

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.29%	13.99%	16.48%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.49%	1.49%	1.49%	1.49%	1.49%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.86%**	**18.56%**	**21.05%**	**11.93%**	**16.03%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.42%**	**19.12%**	**21.61%**	**12.41%**	**16.51%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.54%	13.30%	21.33%	12.21%	14.92%
July 1, 2013 to June 30, 2015	14.48%	13.63%	21.24%	12.41%	15.14%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Milton-Freewater

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,093,468	$6,146,574
Allocated pre-SLGRP pooled liability/(surplus)	(792,197)	(786,771)
Transition liability/(surplus)	671,099	686,935
Allocated pooled OPSRP UAL	281,793	65,787
Side account	0	0
Net unfunded pension actuarial accrued liability	4,254,163	6,112,525
Combined valuation payroll	3,998,039	3,855,702
Net pension UAL as a percentage of payroll	106%	159%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.49%	1.53%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$83,881	$99,884
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,425,086	$225,164	5.78%	$1,466,610	$84,770
Tier 2 General Service	10.58%	754,259	79,801	10.42%	854,108	88,998
Total General Service		**2,179,345**	**304,965**		**2,320,718**	**173,768**
Tier 1 Police & Fire	17.89%	103,485	18,513	15.06%	99,233	14,944
Tier 2 Police & Fire	15.70%	187,621	29,456	15.12%	192,325	29,080
Total Police & Fire		**291,106**	**47,969**		**291,558**	**44,024**
Total		**$2,470,451**	**$352,934**		**$2,612,276**	**$217,792**
Employer normal cost rate						
General Service			**13.99%**			**7.49%**
Police & Fire			**16.48%**			**15.10%**
Aggregate (Default)			**14.29%**			**8.34%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$686,935
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.60%
B. Actual employer payroll	1,999,189
C. Payment to transition liability/(surplus)	31,987
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.60%
B. Actual employer payroll	2,097,505
C. Payment to transition liability/(surplus)	33,560
4. Supplemental payment to transition liability	0
5. Interest	49,711
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$671,099**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	671,099	686,935
2. Combined valuation payroll	3,998,039	3,855,702
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.49%**	**1.53%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,998,039	3,855,702
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Millersburg/2286
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Millersburg/2286

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Millersburg/2286

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Millersburg -- #2286

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Millersburg to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Millersburg.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Millersburg

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.37%	13.37%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.77%)	(1.77%)	(1.77%)	(1.77%)	(1.77%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.44%**	**16.44%**	**19.79%**	**10.43%**	**14.53%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.00%**	**17.00%**	**20.35%**	**10.91%**	**15.01%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.17%	12.17%	19.26%	10.03%	12.74%
July 1, 2013 to June 30, 2015	12.74%	12.74%	19.90%	11.08%	13.81%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Millersburg

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$189,360	$294,174
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(36,896)	(38,228)
Allocated pooled OPSRP UAL	13,036	3,149
Side account	0	0
Net unfunded pension actuarial accrued liability	165,500	259,095
Combined valuation payroll	184,946	184,533
Net pension UAL as a percentage of payroll	89%	140%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.77%)	(1.78%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,880	$4,780
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$59,078	$9,334	5.78%	$61,113	$3,532
Tier 2 General Service	10.58%	51,644	5,464	10.42%	52,976	5,520
Total General Service		**110,722**	**14,798**		**114,089**	**9,052**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$110,722**	**$14,798**		**$114,089**	**$9,052**
Employer normal cost rate						
General Service			**13.37%**			**7.93%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.37%**			**7.93%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($38,228)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.28%)
B. Actual employer payroll	92,711
C. Payment to transition liability/(surplus)	(2,114)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.28%)
B. Actual employer payroll	85,539
C. Payment to transition liability/(surplus)	(1,951)
4. Supplemental payment to transition liability	0
5. Interest	(2,733)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($36,896)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(36,896)	(38,228)
2. Combined valuation payroll	184,946	184,533
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.77%)**	**(1.78%)**

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	184,946	184,533
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Mill City/2207
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Mill City/2207

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Mill City/2207

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Mill City -- #2207

December 2013

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Executive Summary

Milliman has prepared this report for City of Mill City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Mill City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Mill City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.44%	13.44%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.16%	0.16%	0.16%	0.16%	0.16%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.68%**	**16.68%**	**19.96%**	**10.60%**	**14.70%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.24%**	**17.24%**	**20.52%**	**11.08%**	**15.18%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.70%	12.70%	19.98%	10.75%	13.46%
July 1, 2013 to June 30, 2015	12.74%	12.74%	19.89%	11.07%	13.80%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Mill City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$245,736	$335,507
Allocated pre-SLGRP pooled liability/(surplus)	(47,557)	(42,945)
Transition liability/(surplus)	4,255	4,276
Allocated pooled OPSRP UAL	16,916	3,591
Side account	0	0
Net unfunded pension actuarial accrued liability	219,350	300,429
Combined valuation payroll	240,007	210,461
Net pension UAL as a percentage of payroll	91%	143%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.16%	0.17%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,035	$5,452
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$66,338	$10,481	5.78%	$64,983	$3,756
Tier 2 General Service	10.58%	54,877	5,806	10.42%	56,817	5,920
Total General Service		**121,215**	**16,287**		**121,800**	**9,676**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$121,215**	**$16,287**		**$121,800**	**$9,676**
Employer normal cost rate						
General Service			**13.44%**			**7.94%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.44%**			**7.94%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$4,276
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.14%
B. Actual employer payroll	119,434
C. Payment to transition liability/(surplus)	167
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.14%
B. Actual employer payroll	120,430
C. Payment to transition liability/(surplus)	169
4. Supplemental payment to transition liability	0
5. Interest	315
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$4,255**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	4,255	4,276
2. Combined valuation payroll	240,007	210,461
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.16%**	**0.17%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	240,007	210,461
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Medford/2102
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
City of Medford/2102

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Medford/2102

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Medford -- #2102

December 2013

Secondary Employers

2134 Medford Water Commission

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Executive Summary

Milliman has prepared this report for City of Medford to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Medford.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Medford

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.06%	13.24%	16.85%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(6.42%)	(6.42%)	(6.42%)	(6.42%)	(6.42%)
Net pension contribution rate	**13.48%**	**11.66%**	**15.27%**	**5.78%**	**9.88%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.04%**	**12.22%**	**15.83%**	**6.26%**	**10.36%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.84%	8.18%	15.88%	6.56%	9.27%
July 1, 2013 to June 30, 2015	11.68%	8.14%	15.23%	6.41%	9.14%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Medford

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$35,180,528	$53,870,174
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	2,421,814	576,578
Side account	24,876,607	23,491,104
Net unfunded pension actuarial accrued liability	12,725,735	30,955,648
Combined valuation payroll	34,360,381	33,792,376
Net pension UAL as a percentage of payroll	37%	92%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.00%	0.00%
Side account rate relief	(6.42%)	(5.98%)
Allocated pooled RHIA UAL	$720,895	$875,409
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$5,847,004	$923,827	5.78%	$6,357,446	$367,460
Tier 2 General Service	10.58%	5,640,548	596,770	10.42%	5,817,317	606,164
Total General Service		**11,487,552**	**1,520,597**		**12,174,763**	**973,624**
Tier 1 Police & Fire	17.89%	6,175,896	1,104,868	15.06%	6,637,074	999,543
Tier 2 Police & Fire	15.70%	5,587,885	877,298	15.12%	5,503,286	832,097
Total Police & Fire		**11,763,781**	**1,982,166**		**12,140,360**	**1,831,640**
Total		**$23,251,333**	**$3,502,763**		**$24,315,123**	**$2,805,264**
Employer normal cost rate						
General Service			**13.24%**			**8.00%**
Police & Fire			**16.85%**			**15.09%**
Aggregate (Default)			**15.06%**			**11.54%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	34,360,381	33,792,376
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$23,491,104**	**$23,491,104**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,929,601)	(1,929,601)
5. Side account earnings during 2012		3,316,105	3,316,105
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$24,876,607**	**$24,876,607**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$24,876,607	$23,491,104
Side Account 2	0	0
Side Account 3	0	0
Total	**$24,876,607**	**$23,491,104**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$24,876,607	$23,491,104
2. Combined valuation payroll	34,360,381	33,792,376
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(6.42%)	(5.98%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of McMinnville/2117
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of McMinnville/2117

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of McMinnville/2117

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of McMinnville -- #2117

December 2013

Secondary Employers

2135 McMinnville Water & Light Department

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Executive Summary

Milliman has prepared this report for City of McMinnville to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of McMinnville.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of McMinnville

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.71%	13.51%	16.73%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	2.94%	2.94%	2.94%	2.94%	2.94%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.73%**	**19.53%**	**22.75%**	**13.38%**	**17.48%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.29%**	**20.09%**	**23.31%**	**13.86%**	**17.96%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.53%	14.77%	22.75%	13.56%	16.27%
July 1, 2013 to June 30, 2015	17.69%	14.97%	22.36%	13.54%	16.27%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of McMinnville

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$16,435,290	$25,376,829
Allocated pre-SLGRP pooled liability/(surplus)	(3,180,673)	(3,248,272)
Transition liability/(surplus)	5,320,894	5,405,761
Allocated pooled OPSRP UAL	1,131,399	271,611
Side account	0	0
Net unfunded pension actuarial accrued liability	19,706,910	27,805,929
Combined valuation payroll	16,052,142	15,918,704
Net pension UAL as a percentage of payroll	123%	175%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	2.94%	2.92%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$336,781	$412,382
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$3,284,186	$518,901	5.78%	$3,605,275	$208,385
Tier 2 General Service	10.58%	2,574,564	272,389	10.42%	2,554,103	266,138
Total General Service		**5,858,750**	**791,290**		**6,159,378**	**474,523**
Tier 1 Police & Fire	17.89%	1,639,804	293,361	15.06%	1,692,745	254,927
Tier 2 Police & Fire	15.70%	1,834,538	288,022	15.12%	1,888,766	285,581
Total Police & Fire		**3,474,342**	**581,383**		**3,581,511**	**540,508**
Total		**$9,333,092**	**$1,372,673**		**$9,740,889**	**$1,015,031**
Employer normal cost rate						
General Service			**13.51%**			**7.70%**
Police & Fire			**16.73%**			**15.09%**
Aggregate (Default)			**14.71%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$5,405,761
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.95%
B. Actual employer payroll	8,096,181
C. Payment to transition liability/(surplus)	238,837
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.95%
B. Actual employer payroll	8,141,314
C. Payment to transition liability/(surplus)	240,170
4. Supplemental payment to transition liability	0
5. Interest	394,140
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$5,320,894**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	5,320,894	5,405,761
2. Combined valuation payroll	16,052,142	15,918,704
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.94%**	**2.92%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	16,052,142	15,918,704
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Manzanita/2281
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Manzanita/2281

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Manzanita/2281

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Manzanita -- #2281

December 2013

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Executive Summary

Milliman has prepared this report for City of Manzanita to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Manzanita.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Manzanita

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.75%	15.80%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.06%)	(1.06%)	(1.06%)	(1.06%)	(1.06%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.77%**	**17.82%**	**17.72%**	**9.38%**	**13.48%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.33%**	**18.38%**	**18.28%**	**9.86%**	**13.96%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.02%	9.83%	18.16%	9.35%	12.06%
July 1, 2013 to June 30, 2015	13.45%	10.08%	18.42%	9.57%	12.30%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Manzanita

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$576,396	$905,778
Allocated pre-SLGRP pooled liability/(surplus)	(111,548)	(115,941)
Transition liability/(surplus)	(67,203)	(69,047)
Allocated pooled OPSRP UAL	39,679	9,695
Side account	0	0
Net unfunded pension actuarial accrued liability	437,324	730,485
Combined valuation payroll	562,959	568,188
Net pension UAL as a percentage of payroll	78%	129%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.06%)	(1.05%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$11,811	$14,719
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$144,737	$22,868	5.78%	$138,479	$8,004
Tier 2 General Service	10.58%	0	0	10.42%	37,814	3,940
Total General Service		**144,737**	**22,868**		**176,293**	**11,944**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	135,557	21,282	15.12%	119,931	18,134
Total Police & Fire		**135,557**	**21,282**		**119,931**	**18,134**
Total		**$280,294**	**$44,150**		**$296,224**	**$30,078**
Employer normal cost rate						
General Service			**15.80%**			**6.78%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.75%**			**10.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($69,047)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.26%)
B. Actual employer payroll	265,569
C. Payment to transition liability/(surplus)	(3,346)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.26%)
B. Actual employer payroll	275,865
C. Payment to transition liability/(surplus)	(3,476)
4. Supplemental payment to transition liability	0
5. Interest	(4,978)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($67,203)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(67,203)	(69,047)
2. Combined valuation payroll	562,959	568,188
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.06%)**	**(1.05%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	562,959	568,188
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Malin/2247
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Malin/2247

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Malin/2247

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Malin -- #2247

December 2013

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Executive Summary

Milliman has prepared this report for City of Malin to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Malin.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Malin

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.78%	13.24%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.48%)	(2.48%)	(2.48%)	(2.48%)	(2.48%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.38%**	**13.84%**	**18.49%**	**7.96%**	**12.06%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.94%**	**14.40%**	**19.05%**	**8.44%**	**12.54%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.86%	8.86%	16.52%	7.29%	10.00%
July 1, 2013 to June 30, 2015	9.05%	8.79%	15.82%	7.02%	9.75%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Malin

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$140,543	$147,394
Allocated pre-SLGRP pooled liability/(surplus)	(27,199)	(18,867)
Transition liability/(surplus)	(38,379)	(38,672)
Allocated pooled OPSRP UAL	9,675	1,578
Side account	0	0
Net unfunded pension actuarial accrued liability	84,640	91,433
Combined valuation payroll	137,267	92,459
Net pension UAL as a percentage of payroll	62%	99%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.48%)	(3.60%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,880	$2,395
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$45,728	$7,225	5.78%	$45,691	$2,641
Tier 2 General Service	10.58%	44,001	4,655	10.42%	43,244	4,506
Total General Service		**89,729**	**11,880**		**88,935**	**7,147**
Tier 1 Police & Fire	17.89%	44,227	7,912	15.06%	3,524	531
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**44,227**	**7,912**		**3,524**	**531**
Total		**$133,956**	**$19,792**		**$92,459**	**$7,678**
Employer normal cost rate						
General Service			**13.24%**			**8.04%**
Police & Fire			**17.89%**			**15.07%**
Aggregate (Default)			**14.78%**			**8.30%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($38,672)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.32%)
B. Actual employer payroll	46,156
C. Payment to transition liability/(surplus)	(1,532)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.32%)
B. Actual employer payroll	48,300
C. Payment to transition liability/(surplus)	(1,604)
4. Supplemental payment to transition liability	0
5. Interest	(2,843)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($38,379)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(38,379)	(38,672)
2. Combined valuation payroll	137,267	92,459
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.48%)**	**(3.60%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	137,267	92,459
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Madras/2170
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Madras/2170

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Madras/2170

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Madras -- #2170

December 2013

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Executive Summary

Milliman has prepared this report for City of Madras to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Madras.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Madras

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.22%	13.79%	17.10%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.94%)	(2.94%)	(2.94%)	(2.94%)	(2.94%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.12%**	**15.69%**	**19.00%**	**9.26%**	**13.36%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.68%**	**16.25%**	**19.56%**	**9.74%**	**13.84%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.27%	11.34%	19.13%	9.72%	12.43%
July 1, 2013 to June 30, 2015	13.72%	10.83%	18.29%	9.48%	12.21%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Madras

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,859,819	$2,578,069
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(602,535)	(603,984)
Allocated pooled OPSRP UAL	128,029	27,593
Side account	0	0
Net unfunded pension actuarial accrued liability	1,385,313	2,001,678
Combined valuation payroll	1,816,462	1,617,204
Net pension UAL as a percentage of payroll	76%	124%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.94%)	(3.21%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$38,110	$41,894
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$300,283	$47,445	5.78%	$344,980	$19,940
Tier 2 General Service	10.58%	188,267	19,919	10.42%	226,563	23,608
Total General Service		**488,550**	**67,364**		**571,543**	**43,548**
Tier 1 Police & Fire	17.89%	237,761	42,535	15.06%	234,654	35,339
Tier 2 Police & Fire	15.70%	133,015	20,883	15.12%	126,450	19,119
Total Police & Fire		**370,776**	**63,418**		**361,104**	**54,458**
Total		**$859,326**	**$130,782**		**$932,647**	**$98,006**
Employer normal cost rate						
General Service			**13.79%**			**7.62%**
Police & Fire			**17.10%**			**15.08%**
Aggregate (Default)			**15.22%**			**10.51%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($603,984)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.59%)
B. Actual employer payroll	880,162
C. Payment to transition liability/(surplus)	(22,796)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.59%)
B. Actual employer payroll	899,067
C. Payment to transition liability/(surplus)	(23,285)
4. Supplemental payment to transition liability	0
5. Interest	(44,632)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($602,535)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(602,535)	(603,984)
2. Combined valuation payroll	1,816,462	1,617,204
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.94%)**	**(3.21%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,816,462	1,617,204
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Lyons/2270
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
City of Lyons/2270

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Lyons/2270

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Lyons -- #2270

December 2013

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Executive Summary

Milliman has prepared this report for City of Lyons to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Lyons.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Lyons

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.40%	12.40%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.83%)	(1.83%)	(1.83%)	(1.83%)	(1.83%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.41%**	**15.41%**	**19.73%**	**10.37%**	**14.47%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.97%**	**15.97%**	**20.29%**	**10.85%**	**14.95%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.13%	10.13%	17.13%	7.90%	10.61%
July 1, 2013 to June 30, 2015	12.86%	12.86%	19.27%	10.45%	13.18%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Lyons

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$99,376	$170,547
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(20,002)	(23,962)
Allocated pooled OPSRP UAL	6,841	1,825
Side account	0	0
Net unfunded pension actuarial accrued liability	86,215	148,410
Combined valuation payroll	97,059	106,983
Net pension UAL as a percentage of payroll	89%	139%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.83%)	(1.93%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,036	$2,771
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$27,946	$4,415	5.78%	$31,011	$1,792
Tier 2 General Service	10.58%	52,067	5,509	10.42%	51,613	5,378
Total General Service		**80,013**	**9,924**		**82,624**	**7,170**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$80,013**	**$9,924**		**$82,624**	**$7,170**
Employer normal cost rate						
General Service			**12.40%**			**8.68%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.40%**			**8.68%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($23,962)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.41%)
B. Actual employer payroll	66,109
C. Payment to transition liability/(surplus)	(2,915)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.41%)
B. Actual employer payroll	57,309
C. Payment to transition liability/(surplus)	(2,527)
4. Supplemental payment to transition liability	0
5. Interest	(1,482)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($20,002)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(20,002)	(23,962)
2. Combined valuation payroll	97,059	106,983
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.83%)**	**(1.93%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	97,059	106,983
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Lowell/2293
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Lowell/2293

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Lowell/2293

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Lowell -- #2293

December 2013

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Executive Summary

Milliman has prepared this report for City of Lowell to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Lowell.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Lowell

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.63%	12.63%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.42%)	(3.42%)	(3.42%)	(3.42%)	(3.42%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.05%**	**14.05%**	**18.14%**	**8.78%**	**12.88%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.61%**	**14.61%**	**18.70%**	**9.26%**	**13.36%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.56%	10.56%	18.34%	9.11%	11.82%
July 1, 2013 to June 30, 2015	11.21%	11.21%	18.56%	9.74%	12.47%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Lowell

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$200,641	$403,016
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(75,595)	(77,656)
Allocated pooled OPSRP UAL	13,812	4,314
Side account	0	0
Net unfunded pension actuarial accrued liability	138,858	329,674
Combined valuation payroll	195,964	252,809
Net pension UAL as a percentage of payroll	71%	130%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.42%)	(2.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,111	$6,549
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$57,619	$9,104	5.78%	$119,266	$6,894
Tier 2 General Service	10.58%	89,441	9,463	10.42%	87,468	9,114
Total General Service		**147,060**	**18,567**		**206,734**	**16,008**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$147,060**	**$18,567**		**$206,734**	**$16,008**
Employer normal cost rate						
General Service			**12.63%**			**7.74%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.63%**			**7.74%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($77,656)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.20%)
B. Actual employer payroll	128,810
C. Payment to transition liability/(surplus)	(4,122)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.20%)
B. Actual employer payroll	110,602
C. Payment to transition liability/(surplus)	(3,539)
4. Supplemental payment to transition liability	0
5. Interest	(5,600)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($75,595)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(75,595)	(77,656)
2. Combined valuation payroll	195,964	252,809
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.42%)**	**(2.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	195,964	252,809
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Lincoln City/2298
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Lincoln City/2298

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Lincoln City/2298

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Lincoln City -- #2298

December 2013

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Executive Summary

Milliman has prepared this report for City of Lincoln City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Lincoln City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Lincoln City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.13%	13.15%	16.88%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.93%)	(5.93%)	(5.93%)	(5.93%)	(5.93%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.04%**	**12.06%**	**15.79%**	**6.27%**	**10.37%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.60%**	**12.62%**	**16.35%**	**6.75%**	**10.85%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.02%	7.93%	15.66%	6.37%	9.08%
July 1, 2013 to June 30, 2015	10.13%	8.27%	15.44%	6.63%	9.36%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Lincoln City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$6,995,474	$10,841,792
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(4,566,369)	(4,662,489)
Allocated pooled OPSRP UAL	481,566	116,041
Side account	0	0
Net unfunded pension actuarial accrued liability	2,910,671	6,295,344
Combined valuation payroll	6,832,392	6,800,979
Net pension UAL as a percentage of payroll	43%	93%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.93%)	(5.90%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$143,346	$176,183
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,242,025	$196,240	5.78%	$1,526,091	$88,208
Tier 2 General Service	10.58%	1,282,090	135,645	10.42%	1,293,867	134,821
Total General Service		**2,524,115**	**331,885**		**2,819,958**	**223,029**
Tier 1 Police & Fire	17.89%	489,595	87,589	15.06%	581,941	87,640
Tier 2 Police & Fire	15.70%	415,994	65,311	15.12%	406,035	61,392
Total Police & Fire		**905,589**	**152,900**		**987,976**	**149,032**
Total		**$3,429,704**	**$484,785**		**$3,807,934**	**$372,061**
Employer normal cost rate						
General Service			**13.15%**			**7.91%**
Police & Fire			**16.88%**			**15.08%**
Aggregate (Default)			**14.13%**			**9.77%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($4,662,489)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.94%)
B. Actual employer payroll	3,555,736
C. Payment to transition liability/(surplus)	(211,211)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.94%)
B. Actual employer payroll	3,756,886
C. Payment to transition liability/(surplus)	(223,159)
4. Supplemental payment to transition liability	0
5. Interest	(338,250)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($4,566,369)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(4,566,369)	(4,662,489)
2. Combined valuation payroll	6,832,392	6,800,979
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.93%)**	**(5.90%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	6,832,392	6,800,979
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Lebanon/2140
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Lebanon/2140

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Lebanon/2140

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Lebanon -- #2140

December 2013

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Executive Summary

Milliman has prepared this report for City of Lebanon to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Lebanon.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Lebanon

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.79%	14.11%	16.26%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.53%)	(5.53%)	(5.53%)	(5.53%)	(5.53%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.10%**	**13.42%**	**15.57%**	**6.67%**	**10.77%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.66%**	**13.98%**	**16.13%**	**7.15%**	**11.25%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.51%	8.06%	15.89%	6.72%	9.43%
July 1, 2013 to June 30, 2015	10.62%	8.04%	15.61%	6.78%	9.51%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Lebanon

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,387,003	$8,150,628
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,278,176)	(3,329,697)
Allocated pooled OPSRP UAL	370,839	87,237
Side account	0	0
Net unfunded pension actuarial accrued liability	2,479,666	4,908,168
Combined valuation payroll	5,261,418	5,112,831
Net pension UAL as a percentage of payroll	47%	96%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.53%)	(5.60%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$110,387	$132,450
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,541,030	$243,483	5.78%	$1,469,199	$84,920
Tier 2 General Service	10.58%	737,665	78,045	10.42%	891,038	92,846
Total General Service		**2,278,695**	**321,528**		**2,360,237**	**177,766**
Tier 1 Police & Fire	17.89%	270,723	48,432	15.06%	406,031	61,148
Tier 2 Police & Fire	15.70%	781,672	122,723	15.12%	814,686	123,181
Total Police & Fire		**1,052,395**	**171,155**		**1,220,717**	**184,329**
Total		**$3,331,090**	**$492,683**		**$3,580,954**	**$362,095**
Employer normal cost rate						
General Service			**14.11%**			**7.53%**
Police & Fire			**16.26%**			**15.10%**
Aggregate (Default)			**14.79%**			**10.11%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,329,697)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.59%)
B. Actual employer payroll	2,648,225
C. Payment to transition liability/(surplus)	(148,036)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.59%)
B. Actual employer payroll	2,617,415
C. Payment to transition liability/(surplus)	(146,313)
4. Supplemental payment to transition liability	0
5. Interest	(242,828)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($3,278,176)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,278,176)	(3,329,697)
2. Combined valuation payroll	5,261,418	5,112,831
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.53%)**	**(5.60%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	5,261,418	5,112,831
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Lakeside/2244
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Lakeside/2244

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Lakeside/2244

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Lakeside -- #2244

December 2013

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Executive Summary

Milliman has prepared this report for City of Lakeside to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Lakeside.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Lakeside

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.02%	12.02%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(10.41%)	(10.41%)	(10.41%)	(10.41%)	(10.41%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**4.69%**	**4.69%**	**9.39%**	**0.03%**	**4.13%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**5.25%**	**5.25%**	**9.95%**	**0.51%**	**4.61%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.43%	4.43%	11.62%	2.39%	5.10%
July 1, 2013 to June 30, 2015	7.66%	7.66%	14.25%	5.43%	8.16%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Lakeside

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$255,291	$795,059
Allocated pre-SLGRP pooled liability/(surplus)	(49,406)	(101,769)
Transition liability/(surplus)	(292,463)	(301,183)
Allocated pooled OPSRP UAL	17,574	8,510
Side account	0	0
Net unfunded pension actuarial accrued liability	(69,004)	400,617
Combined valuation payroll	249,340	498,735
Net pension UAL as a percentage of payroll	(28%)	80%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(10.41%)	(5.19%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,231	$12,920
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$22,497	$3,555	5.78%	$65,184	$3,768
Tier 2 General Service	10.58%	58,882	6,230	10.42%	92,670	9,656
Total General Service		**81,379**	**9,785**		**157,854**	**13,424**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$81,379**	**$9,785**		**$157,854**	**$13,424**
Employer normal cost rate						
General Service			**12.02%**			**8.50%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.02%**			**8.50%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($301,183)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.22%)
B. Actual employer payroll	210,506
C. Payment to transition liability/(surplus)	(17,304)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.22%)
B. Actual employer payroll	159,126
C. Payment to transition liability/(surplus)	(13,080)
4. Supplemental payment to transition liability	0
5. Interest	(21,664)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($292,463)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(292,463)	(301,183)
2. Combined valuation payroll	249,340	498,735
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(10.41%)**	**(5.19%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	249,340	498,735
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Lake Oswego/2120
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Lake Oswego/2120

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Lake Oswego/2120

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Lake Oswego -- #2120

December 2013

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Executive Summary

Milliman has prepared this report for City of Lake Oswego to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Lake Oswego.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Lake Oswego

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.06%	13.72%	16.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(0.99%)	(0.99%)	(0.99%)	(0.99%)	(0.99%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.91%**	**17.57%**	**20.74%**	**11.21%**	**15.31%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.47%**	**18.13%**	**21.30%**	**11.69%**	**15.79%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.54%	12.42%	20.56%	11.28%	13.99%
July 1, 2013 to June 30, 2015	15.97%	12.81%	20.21%	11.39%	14.12%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Lake Oswego

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$25,447,810	$38,981,575
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(2,766,678)	(2,812,540)
Allocated pooled OPSRP UAL	1,751,818	417,224
Side account	0	0
Net unfunded pension actuarial accrued liability	24,432,950	36,586,259
Combined valuation payroll	24,854,557	24,452,864
Net pension UAL as a percentage of payroll	98%	150%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(0.99%)	(0.99%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$521,459	$633,464
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$5,949,345	$939,997	5.78%	$6,000,196	$346,811
Tier 2 General Service	10.58%	3,935,560	416,382	10.42%	4,196,208	437,245
Total General Service		**9,884,905**	**1,356,379**		**10,196,404**	**784,056**
Tier 1 Police & Fire	17.89%	3,923,828	701,973	15.06%	4,232,769	637,455
Tier 2 Police & Fire	15.70%	3,313,089	520,155	15.12%	3,362,100	508,350
Total Police & Fire		**7,236,917**	**1,222,128**		**7,594,869**	**1,145,805**
Total		**$17,121,822**	**$2,578,507**		**$17,791,273**	**$1,929,861**
Employer normal cost rate						
General Service			**13.72%**			**7.69%**
Police & Fire			**16.89%**			**15.09%**
Aggregate (Default)			**15.06%**			**10.85%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($2,812,540)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.03%)
B. Actual employer payroll	11,891,666
C. Payment to transition liability/(surplus)	(122,484)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.03%)
B. Actual employer payroll	12,457,970
C. Payment to transition liability/(surplus)	(128,317)
4. Supplemental payment to transition liability	0
5. Interest	(204,939)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($2,766,678)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(2,766,678)	(2,812,540)
2. Combined valuation payroll	24,854,557	24,452,864
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.99%)**	**(0.99%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	24,854,557	24,452,864
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Lafayette/2233
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Lafayette/2233

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Lafayette/2233

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Lafayette -- #2233

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Lafayette to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Lafayette.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Lafayette

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.08%	13.08%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.75%)	(4.75%)	(4.75%)	(4.75%)	(4.75%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.17%**	**13.17%**	**16.81%**	**7.45%**	**11.55%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.73%**	**13.73%**	**17.37%**	**7.93%**	**12.03%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.96%	8.42%	14.31%	4.66%	7.37%
July 1, 2013 to June 30, 2015	11.32%	10.77%	17.21%	8.42%	11.15%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Lafayette

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$456,121	$653,250
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(238,734)	(255,398)
Allocated pooled OPSRP UAL	31,399	6,992
Side account	0	0
Net unfunded pension actuarial accrued liability	248,786	404,844
Combined valuation payroll	445,488	409,779
Net pension UAL as a percentage of payroll	56%	99%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.75%)	(5.36%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,347	$10,616
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$137,158	$21,671	5.78%	$93,523	$5,406
Tier 2 General Service	10.58%	149,770	15,846	10.42%	147,094	15,327
Total General Service		**286,928**	**37,517**		**240,617**	**20,733**
Tier 1 Police & Fire	17.89%	0	0	15.06%	22,629	3,408
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**22,629**	**3,408**
Total		**$286,928**	**$37,517**		**$263,246**	**$24,141**
Employer normal cost rate						
General Service			**13.08%**			**8.62%**
Police & Fire			**16.72%**			**15.06%**
Aggregate (Default)			**13.08%**			**9.17%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($255,398)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.65%)
B. Actual employer payroll	218,047
C. Payment to transition liability/(surplus)	(16,681)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.65%)
B. Actual employer payroll	230,939
C. Payment to transition liability/(surplus)	(17,667)
4. Supplemental payment to transition liability	0
5. Interest	(17,684)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($238,734)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(238,734)	(255,398)
2. Combined valuation payroll	445,488	409,779
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.75%)**	**(5.36%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	445,488	409,779
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of La Grande/2263
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of La Grande/2263

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of La Grande/2263

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

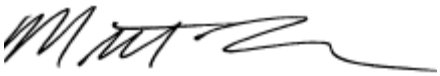
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

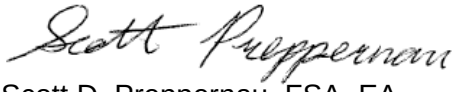
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of La Grande -- #2263

December 2013

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Executive Summary

Milliman has prepared this report for City of La Grande to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of La Grande.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of La Grande

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.86%	13.34%	16.86%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(4.76%)	(4.76%)	(4.76%)	(4.76%)	(4.76%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.18%**	**11.66%**	**15.18%**	**5.68%**	**9.78%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.74%**	**12.22%**	**15.74%**	**6.16%**	**10.26%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.81%	7.97%	15.81%	6.52%	9.23%
July 1, 2013 to June 30, 2015	15.33%	8.16%	15.33%	6.51%	9.24%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of La Grande

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,178,416	$3,424,922
Allocated pre-SLGRP pooled liability/(surplus)	(421,582)	(438,395)
Transition liability/(surplus)	(1,141,744)	(1,142,749)
Allocated pooled OPSRP UAL	149,961	36,657
Side account	0	0
Net unfunded pension actuarial accrued liability	765,051	1,880,435
Combined valuation payroll	2,127,632	2,148,429
Net pension UAL as a percentage of payroll	36%	88%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(4.76%)	(4.58%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$44,639	$55,656
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	817,578	146,265	15.06%	856,811	129,036
Tier 2 Police & Fire	15.70%	722,678	113,460	15.12%	785,525	118,771
Total Police & Fire		**1,540,256**	**259,725**		**1,642,336**	**247,807**
Total		**$1,540,256**	**$259,725**		**$1,642,336**	**$247,807**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.86%**			**15.09%**
Aggregate (Default)			**16.86%**			**15.09%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,142,749)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.09%)
B. Actual employer payroll	1,051,184
C. Payment to transition liability/(surplus)	(42,993)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.09%)
B. Actual employer payroll	1,041,210
C. Payment to transition liability/(surplus)	(42,586)
4. Supplemental payment to transition liability	0
5. Interest	(84,574)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,141,744)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,141,744)	(1,142,749)
2. Combined valuation payroll	2,127,632	2,148,429
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.76%)**	**(4.58%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,127,632	2,148,429
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Klamath Falls/2148
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Klamath Falls/2148

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Klamath Falls/2148

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Klamath Falls -- #2148

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Klamath Falls to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Klamath Falls.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Klamath Falls

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.55%	13.60%	16.02%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(6.84%)	(6.84%)	(6.84%)	(6.84%)	(6.84%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.79%**	**9.84%**	**12.26%**	**3.60%**	**7.70%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.35%**	**10.40%**	**12.82%**	**4.08%**	**8.18%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.82%	5.91%	13.75%	4.75%	7.46%
July 1, 2013 to June 30, 2015	8.45%	5.54%	13.03%	4.19%	6.92%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Klamath Falls

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$8,720,904	$14,058,712
Allocated pre-SLGRP pooled liability/(surplus)	(1,687,731)	(1,799,536)
Transition liability/(surplus)	(6,566,725)	(6,594,945)
Allocated pooled OPSRP UAL	600,344	150,472
Side account	0	0
Net unfunded pension actuarial accrued liability	1,066,792	5,814,703
Combined valuation payroll	8,517,598	8,818,930
Net pension UAL as a percentage of payroll	13%	66%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(6.84%)	(6.43%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$178,703	$228,459
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,004,819	$316,761	5.78%	$2,269,709	$131,189
Tier 2 General Service	10.58%	1,463,046	154,790	10.42%	1,494,099	155,685
Total General Service		**3,467,865**	**471,551**		**3,763,808**	**286,874**
Tier 1 Police & Fire	17.89%	332,305	59,449	15.06%	421,413	63,465
Tier 2 Police & Fire	15.70%	1,919,661	301,387	15.12%	1,971,559	298,100
Total Police & Fire		**2,251,966**	**360,836**		**2,392,972**	**361,565**
Total		**$5,719,831**	**$832,387**		**$6,156,780**	**$648,439**
Employer normal cost rate						
General Service			**13.60%**			**7.62%**
Police & Fire			**16.02%**			**15.11%**
Aggregate (Default)			**14.55%**			**10.53%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($6,594,945)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.86%)
B. Actual employer payroll	4,314,502
C. Payment to transition liability/(surplus)	(252,830)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.86%)
B. Actual employer payroll	4,467,835
C. Payment to transition liability/(surplus)	(261,814)
4. Supplemental payment to transition liability	0
5. Interest	(486,424)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($6,566,725)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(6,566,725)	(6,594,945)
2. Combined valuation payroll	8,517,598	8,818,930
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.84%)**	**(6.43%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	8,517,598	8,818,930
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of King City/2287
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of King City/2287

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of King City/2287

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of King City -- #2287

December 2013

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Executive Summary

Milliman has prepared this report for City of King City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of King City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of King City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.58%)	(5.58%)	(5.58%)	(5.58%)	(5.58%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.96%**	**12.60%**	**14.96%**	**6.62%**	**10.72%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.52%**	**13.16%**	**15.52%**	**7.10%**	**11.20%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.67%	7.31%	14.67%	5.86%	8.57%
July 1, 2013 to June 30, 2015	15.25%	8.05%	15.25%	6.40%	9.13%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of King City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$289,442	$427,693
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(177,913)	(186,665)
Allocated pooled OPSRP UAL	19,925	4,578
Side account	0	0
Net unfunded pension actuarial accrued liability	131,454	245,606
Combined valuation payroll	282,694	268,289
Net pension UAL as a percentage of payroll	47%	92%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.58%)	(5.98%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,931	$6,950
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	141,506	22,216	15.12%	136,565	20,649
Total Police & Fire		**141,506**	**22,216**		**136,565**	**20,649**
Total		**$141,506**	**$22,216**		**$136,565**	**$20,649**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($186,665)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.45%)
B. Actual employer payroll	171,469
C. Payment to transition liability/(surplus)	(11,060)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.45%)
B. Actual employer payroll	168,540
C. Payment to transition liability/(surplus)	(10,871)
4. Supplemental payment to transition liability	0
5. Interest	(13,179)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($177,913)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(177,913)	(186,665)
2. Combined valuation payroll	282,694	268,289
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.58%)**	**(5.98%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	282,694	268,289
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Junction City/2199
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Junction City/2199

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Junction City/2199

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Junction City -- #2199

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Junction City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Junction City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Junction City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.30%	11.88%	16.14%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.61%)	(0.61%)	(0.61%)	(0.61%)	(0.61%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.77%**	**14.35%**	**18.61%**	**9.83%**	**13.93%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.33%**	**14.91%**	**19.17%**	**10.31%**	**14.41%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.29%	12.32%	18.99%	9.91%	12.62%
July 1, 2013 to June 30, 2015	15.02%	12.79%	18.78%	9.95%	12.68%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Junction City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,505,519	$3,575,061
Allocated pre-SLGRP pooled liability/(surplus)	(484,886)	(457,613)
Transition liability/(surplus)	(169,015)	(173,836)
Allocated pooled OPSRP UAL	172,479	38,264
Side account	0	0
Net unfunded pension actuarial accrued liability	2,024,097	2,981,876
Combined valuation payroll	2,447,109	2,242,610
Net pension UAL as a percentage of payroll	83%	133%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.61%)	(0.67%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$51,341	$58,096
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$246,462	$38,941	5.78%	$272,574	$15,755
Tier 2 General Service	10.58%	745,933	78,920	10.42%	694,023	72,317
Total General Service		**992,395**	**117,861**		**966,597**	**88,072**
Tier 1 Police & Fire	17.89%	100,316	17,947	15.06%	159,274	23,987
Tier 2 Police & Fire	15.70%	394,776	61,980	15.12%	412,628	62,389
Total Police & Fire		**495,092**	**79,927**		**571,902**	**86,376**
Total		**$1,487,487**	**$197,788**		**$1,538,499**	**$174,448**
Employer normal cost rate						
General Service			**11.88%**			**9.11%**
Police & Fire			**16.14%**			**15.10%**
Aggregate (Default)			**13.30%**			**11.34%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($173,836)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.70%)
B. Actual employer payroll	1,119,958
C. Payment to transition liability/(surplus)	(7,840)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.70%)
B. Actual employer payroll	1,357,372
C. Payment to transition liability/(surplus)	(9,501)
4. Supplemental payment to transition liability	0
5. Interest	(12,520)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($169,015)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(169,015)	(173,836)
2. Combined valuation payroll	2,447,109	2,242,610
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.61%)**	**(0.67%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,447,109	2,242,610
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Jordan Valley/2256
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Jordan Valley/2256

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Jordan Valley/2256

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Jordan Valley -- #2256

December 2013

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Executive Summary

Milliman has prepared this report for City of Jordan Valley to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Jordan Valley.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Jordan Valley

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(27.92%)	(27.92%)	(27.92%)	(27.92%)	(27.92%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Jordan Valley

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$60,344	$95,252
Allocated pre-SLGRP pooled liability/(surplus)	(11,678)	(12,192)
Transition liability/(surplus)	(185,467)	(179,320)
Allocated pooled OPSRP UAL	4,154	1,019
Side account	0	0
Net unfunded pension actuarial accrued liability	(132,647)	(95,241)
Combined valuation payroll	58,937	59,751
Net pension UAL as a percentage of payroll	(225%)	(159%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(27.92%)	(25.81%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,237	$1,548
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	44,681	4,727	10.42%	45,881	4,781
Total General Service		**44,681**	**4,727**		**45,881**	**4,781**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$44,681**	**$4,727**		**$45,881**	**$4,781**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($179,320)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(14.37%)
B. Actual employer payroll	27,770
C. Payment to transition liability/(surplus)	(3,740)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(14.37%)
B. Actual employer payroll	28,603
C. Payment to transition liability/(surplus)	(3,851)
4. Supplemental payment to transition liability	0
5. Interest	(13,738)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($185,467)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(185,467)	(179,320)
2. Combined valuation payroll	58,937	59,751
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(27.92%)**	**(25.81%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	58,937	59,751
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of John Day/2229
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of John Day/2229

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of John Day/2229

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of John Day -- #2229

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of John Day to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of John Day.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of John Day

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.44%	13.14%	16.58%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(8.13%)	(8.13%)	(8.13%)	(8.13%)	(8.13%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.15%**	**9.85%**	**13.29%**	**4.07%**	**8.17%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.71%**	**10.41%**	**13.85%**	**4.55%**	**8.65%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.03%	5.72%	13.12%	3.96%	6.67%
July 1, 2013 to June 30, 2015	8.32%	5.77%	13.10%	4.27%	7.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of John Day

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$875,941	$1,343,471
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(784,194)	(796,510)
Allocated pooled OPSRP UAL	60,299	14,379
Side account	0	0
Net unfunded pension actuarial accrued liability	152,046	561,340
Combined valuation payroll	855,521	842,750
Net pension UAL as a percentage of payroll	18%	67%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(8.13%)	(8.13%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$17,949	$21,832
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$134,840	$21,305	5.78%	$173,942	$10,054
Tier 2 General Service	10.58%	140,185	14,832	10.42%	131,032	13,654
Total General Service		**275,025**	**36,137**		**304,974**	**23,708**
Tier 1 Police & Fire	17.89%	66,988	11,984	15.06%	65,476	9,861
Tier 2 Police & Fire	15.70%	100,599	15,794	15.12%	96,851	14,644
Total Police & Fire		**167,587**	**27,778**		**162,327**	**24,505**
Total		**$442,612**	**$63,915**		**$467,301**	**$48,213**
Employer normal cost rate						
General Service			**13.14%**			**7.77%**
Police & Fire			**16.58%**			**15.10%**
Aggregate (Default)			**14.44%**			**10.32%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($796,510)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.35%)
B. Actual employer payroll	426,965
C. Payment to transition liability/(surplus)	(35,652)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.35%)
B. Actual employer payroll	416,199
C. Payment to transition liability/(surplus)	(34,752)
4. Supplemental payment to transition liability	0
5. Interest	(58,088)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($784,194)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(784,194)	(796,510)
2. Combined valuation payroll	855,521	842,750
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.13%)**	**(8.13%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	855,521	842,750
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Jefferson/2211
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Jefferson/2211

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Jefferson/2211

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Jefferson -- #2211

December 2013

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Executive Summary

Milliman has prepared this report for City of Jefferson to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Jefferson.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Jefferson

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.24%	14.24%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(28.64%)	(28.64%)	(28.64%)	(28.64%)	(28.64%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Jefferson

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$374,793	$549,890
Allocated pre-SLGRP pooled liability/(surplus)	(72,533)	(70,387)
Transition liability/(surplus)	(1,181,586)	(1,133,573)
Allocated pooled OPSRP UAL	25,801	5,886
Side account	0	0
Net unfunded pension actuarial accrued liability	(853,525)	(648,184)
Combined valuation payroll	366,056	344,942
Net pension UAL as a percentage of payroll	(233%)	(188%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(28.64%)	(28.27%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$7,680	$8,936
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$202,385	$31,977	5.78%	$191,968	$11,096
Tier 2 General Service	10.58%	86,314	9,132	10.42%	84,100	8,763
Total General Service		**288,699**	**41,109**		**276,068**	**19,859**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$288,699**	**$41,109**		**$276,068**	**$19,859**
Employer normal cost rate						
General Service			**14.24%**			**7.19%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.24%**			**7.19%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,133,573)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(11.43%)
B. Actual employer payroll	170,249
C. Payment to transition liability/(surplus)	(19,153)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(11.43%)
B. Actual employer payroll	180,652
C. Payment to transition liability/(surplus)	(20,359)
4. Supplemental payment to transition liability	0
5. Interest	(87,525)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,181,586)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,181,586)	(1,133,573)
2. Combined valuation payroll	366,056	344,942
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(28.64%)**	**(28.27%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	366,056	344,942
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

December 2013

City of Irrigon/2266
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Irrigon/2266

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Irrigon/2266

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Irrigon -- #2266

December 2013

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Executive Summary

Milliman has prepared this report for City of Irrigon to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Irrigon.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Irrigon

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.65%	13.65%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.49%)	(1.49%)	(1.49%)	(1.49%)	(1.49%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.24%**	**15.24%**	**18.31%**	**8.95%**	**13.05%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.80%**	**15.80%**	**18.87%**	**9.43%**	**13.53%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.48%	10.48%	18.38%	9.15%	11.86%
July 1, 2013 to June 30, 2015	10.64%	10.64%	18.04%	9.22%	11.95%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Irrigon

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$410,738	$674,465
Allocated pre-SLGRP pooled liability/(surplus)	(79,489)	(86,333)
Transition liability/(surplus)	(67,451)	(68,626)
Allocated pooled OPSRP UAL	28,275	7,219
Side account	0	0
Net unfunded pension actuarial accrued liability	292,073	526,725
Combined valuation payroll	401,163	423,087
Net pension UAL as a percentage of payroll	73%	125%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.49%)	(1.40%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,417	$10,960
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$156,831	$24,779	5.78%	$150,983	$8,727
Tier 2 General Service	10.58%	109,813	11,618	10.42%	105,378	10,980
Total General Service		**266,644**	**36,397**		**256,361**	**19,707**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$266,644**	**$36,397**		**$256,361**	**$19,707**
Employer normal cost rate						
General Service			**13.65%**			**7.69%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.65%**			**7.69%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($68,626)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.46%)
B. Actual employer payroll	207,043
C. Payment to transition liability/(surplus)	(3,023)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.46%)
B. Actual employer payroll	215,603
C. Payment to transition liability/(surplus)	(3,148)
4. Supplemental payment to transition liability	0
5. Interest	(4,996)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($67,451)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(67,451)	(68,626)
2. Combined valuation payroll	401,163	423,087
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.49%)**	**(1.40%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	401,163	423,087
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Independence/2267
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Independence/2267

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Independence/2267

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Independence -- #2267

December 2013

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Executive Summary

Milliman has prepared this report for City of Independence to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Independence.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Independence

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.46%	14.23%	17.20%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.87%)	(2.87%)	(2.87%)	(2.87%)	(2.87%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.67%**	**14.44%**	**17.41%**	**7.57%**	**11.67%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.23%**	**15.00%**	**17.97%**	**8.05%**	**12.15%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.13%	9.83%	17.90%	8.53%	11.24%
July 1, 2013 to June 30, 2015	12.17%	9.21%	16.86%	8.05%	10.78%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Independence

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,191,299	$3,662,407
Allocated pre-SLGRP pooled liability/(surplus)	(424,076)	(468,794)
Transition liability/(surplus)	(692,953)	(687,592)
Allocated pooled OPSRP UAL	150,848	39,199
Side account	0	0
Net unfunded pension actuarial accrued liability	1,225,118	2,545,220
Combined valuation payroll	2,140,214	2,297,402
Net pension UAL as a percentage of payroll	57%	111%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.87%)	(2.57%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$44,903	$59,515
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$532,837	$84,188	5.78%	$541,086	$31,275
Tier 2 General Service	10.58%	228,994	24,228	10.42%	297,405	30,990
Total General Service		**761,831**	**108,416**		**838,491**	**62,265**
Tier 1 Police & Fire	17.89%	367,572	65,759	15.06%	369,819	55,695
Tier 2 Police & Fire	15.70%	168,536	26,460	15.12%	159,931	24,182
Total Police & Fire		**536,108**	**92,219**		**529,750**	**79,877**
Total		**$1,297,939**	**$200,635**		**$1,368,241**	**$142,142**
Employer normal cost rate						
General Service			**14.23%**			**7.43%**
Police & Fire			**17.20%**			**15.08%**
Aggregate (Default)			**15.46%**			**10.39%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($687,592)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.08%)
B. Actual employer payroll	1,095,850
C. Payment to transition liability/(surplus)	(22,794)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.08%)
B. Actual employer payroll	1,114,157
C. Payment to transition liability/(surplus)	(23,175)
4. Supplemental payment to transition liability	0
5. Interest	(51,330)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($692,953)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(692,953)	(687,592)
2. Combined valuation payroll	2,140,214	2,297,402
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.87%)**	**(2.57%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,140,214	2,297,402
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Huntington/2191
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Huntington/2191

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Huntington/2191

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Huntington -- #2191

December 2013

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Executive Summary

Milliman has prepared this report for City of Huntington to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Huntington.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Huntington

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	35.61%	35.61%	35.61%	35.61%	35.61%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**52.62%**	**52.03%**	**55.41%**	**46.05%**	**50.15%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**53.18%**	**52.59%**	**55.97%**	**46.53%**	**50.63%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	55.46%	54.15%	61.93%	52.70%	55.41%
July 1, 2013 to June 30, 2015	50.88%	49.65%	56.82%	48.00%	50.73%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Huntington

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$92,627	$138,484
Allocated pre-SLGRP pooled liability/(surplus)	(17,926)	(17,726)
Transition liability/(surplus)	363,152	377,479
Allocated pooled OPSRP UAL	6,376	1,482
Side account	0	0
Net unfunded pension actuarial accrued liability	444,229	499,719
Combined valuation payroll	90,468	86,870
Net pension UAL as a percentage of payroll	491%	575%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	35.61%	37.38%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,898	$2,250
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$377,479
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	42.09%
B. Actual employer payroll	47,113
C. Payment to transition liability/(surplus)	19,830
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	42.09%
B. Actual employer payroll	50,836
C. Payment to transition liability/(surplus)	21,397
4. Supplemental payment to transition liability	0
5. Interest	26,900
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$363,152**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	363,152	377,479
2. Combined valuation payroll	90,468	86,870
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**35.61%**	**37.38%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	90,468	86,870
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Hubbard/2196
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Hubbard/2196

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Hubbard/2196

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Hubbard -- #2196

December 2013

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Executive Summary

Milliman has prepared this report for City of Hubbard to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Hubbard.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Hubbard

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.88%	14.85%	17.17%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(0.13%)	(0.13%)	(0.13%)	(0.13%)	(0.13%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.59%**	**19.56%**	**21.88%**	**12.07%**	**16.17%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.15%**	**20.12%**	**22.44%**	**12.55%**	**16.65%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.82%	13.62%	21.64%	12.18%	14.89%
July 1, 2013 to June 30, 2015	16.89%	13.26%	21.74%	12.93%	15.66%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Hubbard

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$754,424	$1,137,062
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(11,101)	(11,190)
Allocated pooled OPSRP UAL	51,934	12,170
Side account	0	0
Net unfunded pension actuarial accrued liability	795,257	1,138,042
Combined valuation payroll	736,836	713,271
Net pension UAL as a percentage of payroll	108%	160%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(0.13%)	(0.13%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$15,459	$18,478
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$190,881	$30,159	5.78%	$193,369	$11,177
Tier 2 General Service	10.58%	42,324	4,478	10.42%	41,762	4,352
Total General Service		**233,205**	**34,637**		**235,131**	**15,529**
Tier 1 Police & Fire	17.89%	125,123	22,385	15.06%	119,020	17,924
Tier 2 Police & Fire	15.70%	61,196	9,608	15.12%	56,751	8,581
Total Police & Fire		**186,319**	**31,993**		**175,771**	**26,505**
Total		**$419,524**	**$66,630**		**$410,902**	**$42,034**
Employer normal cost rate						
General Service			**14.85%**			**6.60%**
Police & Fire			**17.17%**			**15.08%**
Aggregate (Default)			**15.88%**			**10.23%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($11,190)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.13%)
B. Actual employer payroll	351,449
C. Payment to transition liability/(surplus)	(457)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.13%)
B. Actual employer payroll	349,696
C. Payment to transition liability/(surplus)	(454)
4. Supplemental payment to transition liability	0
5. Interest	(822)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($11,101)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(11,101)	(11,190)
2. Combined valuation payroll	736,836	713,271
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.13%)**	**(0.13%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	736,836	713,271
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Hood River/2138
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Hood River/2138

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Hood River/2138

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Hood River -- #2138

December 2013

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Executive Summary

Milliman has prepared this report for City of Hood River to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Hood River.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Hood River

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.88%	16.54%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.02%)	(1.02%)	(1.02%)	(1.02%)	(1.02%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.76%**	**15.94%**	**18.60%**	**9.42%**	**13.52%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.32%**	**16.50%**	**19.16%**	**9.90%**	**14.00%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.02%	10.83%	18.92%	9.73%	12.44%
July 1, 2013 to June 30, 2015	15.95%	10.81%	18.35%	9.52%	12.25%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Hood River

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,853,618	$5,417,202
Allocated pre-SLGRP pooled liability/(surplus)	(745,779)	(693,410)
Transition liability/(surplus)	(434,265)	(433,415)
Allocated pooled OPSRP UAL	265,282	57,981
Side account	0	0
Net unfunded pension actuarial accrued liability	2,938,856	4,348,358
Combined valuation payroll	3,763,780	3,398,172
Net pension UAL as a percentage of payroll	78%	128%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.02%)	(1.10%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$78,966	$88,031
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$524,233	$82,829	5.78%	$493,661	$28,534
Tier 2 General Service	10.58%	304,774	32,245	10.42%	307,970	32,090
Total General Service		**829,007**	**115,074**		**801,631**	**60,624**
Tier 1 Police & Fire	17.89%	689,303	123,316	15.06%	641,287	96,578
Tier 2 Police & Fire	15.70%	1,111,051	174,435	15.12%	1,073,407	162,299
Total Police & Fire		**1,800,354**	**297,751**		**1,714,694**	**258,877**
Total		**$2,629,361**	**$412,825**		**$2,516,325**	**$319,501**
Employer normal cost rate						
General Service			**13.88%**			**7.56%**
Police & Fire			**16.54%**			**15.10%**
Aggregate (Default)			**15.70%**			**12.70%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($433,415)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.88%)
B. Actual employer payroll	1,676,445
C. Payment to transition liability/(surplus)	(14,753)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.88%)
B. Actual employer payroll	1,882,469
C. Payment to transition liability/(surplus)	(16,565)
4. Supplemental payment to transition liability	0
5. Interest	(32,168)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($434,265)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(434,265)	(433,415)
2. Combined valuation payroll	3,763,780	3,398,172
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.02%)**	**(1.10%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,763,780	3,398,172
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Hines/2226
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Hines/2226

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Hines/2226

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Hines -- #2226

December 2013

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Executive Summary

Milliman has prepared this report for City of Hines to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Hines.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Hines

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.69%	13.69%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.11%)	(1.11%)	(1.11%)	(1.11%)	(1.11%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.66%**	**15.66%**	**18.69%**	**9.33%**	**13.43%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.22%**	**16.22%**	**19.25%**	**9.81%**	**13.91%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.34%	10.01%	18.53%	9.72%	12.43%
July 1, 2013 to June 30, 2015	11.18%	11.18%	18.77%	9.95%	12.68%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Hines

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$323,769	$511,318
Allocated pre-SLGRP pooled liability/(surplus)	(62,658)	(65,449)
Transition liability/(surplus)	(39,665)	(39,577)
Allocated pooled OPSRP UAL	22,288	5,473
Side account	0	0
Net unfunded pension actuarial accrued liability	243,734	411,765
Combined valuation payroll	316,221	320,746
Net pension UAL as a percentage of payroll	77%	128%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.11%)	(1.06%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,634	$8,309
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$83,927	$13,260	5.78%	$93,405	$5,399
Tier 2 General Service	10.58%	57,083	6,039	10.42%	55,219	5,754
Total General Service		**141,010**	**19,299**		**148,624**	**11,153**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$141,010**	**$19,299**		**$148,624**	**$11,153**
Employer normal cost rate						
General Service			**13.69%**			**7.50%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.69%**			**7.50%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($39,577)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.89%)
B. Actual employer payroll	159,463
C. Payment to transition liability/(surplus)	(1,419)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.89%)
B. Actual employer payroll	160,762
C. Payment to transition liability/(surplus)	(1,431)
4. Supplemental payment to transition liability	0
5. Interest	(2,938)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($39,665)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(39,665)	(39,577)
2. Combined valuation payroll	316,221	320,746
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.11%)**	**(1.06%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	316,221	320,746
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Hermiston/2160
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Hermiston/2160

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Hermiston/2160

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Hermiston -- #2160

December 2013

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Executive Summary

Milliman has prepared this report for City of Hermiston to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Hermiston.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Hermiston

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.59%	12.19%	16.25%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.47%)	(1.47%)	(1.47%)	(1.47%)	(1.47%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.96%**	**15.56%**	**19.62%**	**10.73%**	**14.83%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.52%**	**16.12%**	**20.18%**	**11.21%**	**15.31%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.43%	13.21%	19.93%	10.83%	13.54%
July 1, 2013 to June 30, 2015	15.68%	13.58%	19.67%	10.84%	13.57%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Hermiston

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,985,294	$7,332,412
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(805,845)	(823,819)
Allocated pooled OPSRP UAL	343,186	78,480
Side account	0	0
Net unfunded pension actuarial accrued liability	4,522,635	6,587,073
Combined valuation payroll	4,869,074	4,599,570
Net pension UAL as a percentage of payroll	93%	143%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.47%)	(1.54%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$102,155	$119,154
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$706,161	$111,573	5.78%	$686,246	$39,665
Tier 2 General Service	10.58%	1,577,408	166,890	10.42%	1,570,777	163,675
Total General Service		**2,283,569**	**278,463**		**2,257,023**	**203,340**
Tier 1 Police & Fire	17.89%	299,143	53,517	15.06%	361,141	54,388
Tier 2 Police & Fire	15.70%	893,089	140,215	15.12%	823,703	124,544
Total Police & Fire		**1,192,232**	**193,732**		**1,184,844**	**178,932**
Total		**$3,475,801**	**$472,195**		**$3,441,867**	**$382,272**
Employer normal cost rate						
General Service			**12.19%**			**9.01%**
Police & Fire			**16.25%**			**15.10%**
Aggregate (Default)			**13.59%**			**11.11%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($823,819)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.48%)
B. Actual employer payroll	2,492,756
C. Payment to transition liability/(surplus)	(36,893)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.48%)
B. Actual employer payroll	2,754,956
C. Payment to transition liability/(surplus)	(40,773)
4. Supplemental payment to transition liability	0
5. Interest	(59,692)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($805,845)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(805,845)	(823,819)
2. Combined valuation payroll	4,869,074	4,599,570
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.47%)**	**(1.54%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	4,869,074	4,599,570
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Heppner/2193
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Heppner/2193

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Heppner/2193

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Heppner -- #2193

December 2013

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Executive Summary

Milliman has prepared this report for City of Heppner to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Heppner.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Heppner

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(23.83%)	(23.83%)	(23.83%)	(23.83%)	(23.83%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	2.79%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	3.41%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Heppner

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$175,256	$389,494
Allocated pre-SLGRP pooled liability/(surplus)	(33,917)	(49,856)
Transition liability/(surplus)	(459,690)	(455,331)
Allocated pooled OPSRP UAL	12,065	4,169
Side account	0	0
Net unfunded pension actuarial accrued liability	(306,286)	(111,524)
Combined valuation payroll	171,170	244,327
Net pension UAL as a percentage of payroll	(179%)	(46%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(23.83%)	(16.03%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,591	$6,329
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	114,183	11,898
Total General Service		**0**	**0**		**114,183**	**11,898**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$114,183**	**$11,898**
Employer normal cost rate						
General Service			**13.34%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($455,331)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(14.37%)
B. Actual employer payroll	132,719
C. Payment to transition liability/(surplus)	(16,141)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(14.37%)
B. Actual employer payroll	122,581
C. Payment to transition liability/(surplus)	(13,551)
4. Supplemental payment to transition liability	0
5. Interest	(34,051)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($459,690)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(459,690)	(455,331)
2. Combined valuation payroll	171,170	244,327
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(23.83%)**	**(16.03%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	171,170	244,327
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Harrisburg/2268
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Harrisburg/2268

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Harrisburg/2268

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Harrisburg -- #2268

December 2013

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Executive Summary

Milliman has prepared this report for City of Harrisburg to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Harrisburg.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Harrisburg

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.06%	13.06%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.83%)	(0.83%)	(0.83%)	(0.83%)	(0.83%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.31%**	**15.31%**	**18.97%**	**9.61%**	**13.71%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.87%**	**15.87%**	**19.53%**	**10.09%**	**14.19%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.53%	11.53%	19.02%	9.79%	12.50%
July 1, 2013 to June 30, 2015	11.68%	11.68%	18.59%	9.77%	12.50%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Harrisburg

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$719,083	$1,069,070
Allocated pre-SLGRP pooled liability/(surplus)	(139,162)	(136,843)
Transition liability/(surplus)	(65,370)	(66,182)
Allocated pooled OPSRP UAL	49,501	11,442
Side account	0	0
Net unfunded pension actuarial accrued liability	564,052	877,487
Combined valuation payroll	702,319	670,620
Net pension UAL as a percentage of payroll	80%	131%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.83%)	(0.85%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$14,735	$17,373
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$206,032	$32,553	5.78%	$206,275	$11,923
Tier 2 General Service	10.58%	227,621	24,082	10.42%	220,302	22,955
Total General Service		**433,653**	**56,635**		**426,577**	**34,878**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$433,653**	**$56,635**		**$426,577**	**$34,878**
Employer normal cost rate						
General Service			**13.06%**			**8.18%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.06%**			**8.18%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($66,182)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.82%)
B. Actual employer payroll	338,446
C. Payment to transition liability/(surplus)	(2,775)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.82%)
B. Actual employer payroll	351,053
C. Payment to transition liability/(surplus)	(2,879)
4. Supplemental payment to transition liability	0
5. Interest	(4,842)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($65,370)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(65,370)	(66,182)
2. Combined valuation payroll	702,319	670,620
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.83%)**	**(0.85%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	702,319	670,620
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Happy Valley/2296
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Happy Valley/2296

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Happy Valley/2296

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Happy Valley -- #2296

December 2013

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Executive Summary

Milliman has prepared this report for City of Happy Valley to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Happy Valley.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Happy Valley

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.66%**	**13.66%**	**19.80%**	**10.44%**	**14.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.22%**	**14.22%**	**20.36%**	**10.92%**	**15.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.14%	14.14%	19.84%	10.61%	13.32%
July 1, 2013 to June 30, 2015	14.48%	14.48%	19.44%	10.62%	13.35%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Happy Valley

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,009,634	$2,899,832
Allocated pre-SLGRP pooled liability/(surplus)	(388,918)	(371,183)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	138,342	31,037
Side account	0	0
Net unfunded pension actuarial accrued liability	1,759,058	2,559,686
Combined valuation payroll	1,962,784	1,819,044
Net pension UAL as a percentage of payroll	90%	141%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$41,180	$47,123
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$59,302	$3,428
Tier 2 General Service	10.58%	938,615	99,305	10.42%	884,185	92,132
Total General Service		**938,615**	**99,305**		**943,487**	**95,560**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$938,615**	**$99,305**		**$943,487**	**$95,560**
Employer normal cost rate						
General Service			**10.58%**			**10.13%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.13%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	1,962,784	1,819,044
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,962,784	1,819,044
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Halsey/2284
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Halsey/2284

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Halsey/2284

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

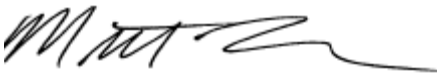
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

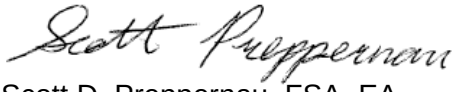
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Halsey -- #2284

December 2013

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Executive Summary

Milliman has prepared this report for City of Halsey to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Halsey.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Halsey

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(7.03%)	(7.03%)	(7.03%)	(7.03%)	(7.03%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**8.39%**	**8.39%**	**14.53%**	**5.17%**	**9.27%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**8.95%**	**8.95%**	**15.09%**	**5.65%**	**9.75%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.31%	9.31%	14.78%	5.55%	8.26%
July 1, 2013 to June 30, 2015	10.43%	10.43%	15.10%	6.28%	9.01%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Halsey

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$209,657	$370,219
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(162,191)	(164,773)
Allocated pooled OPSRP UAL	14,433	3,962
Side account	0	0
Net unfunded pension actuarial accrued liability	61,899	209,408
Combined valuation payroll	204,769	232,236
Net pension UAL as a percentage of payroll	30%	90%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(7.03%)	(6.10%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,296	$6,016
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	204,769	21,665	10.42%	190,329	19,832
Total General Service		**204,769**	**21,665**		**190,329**	**19,832**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$204,769**	**$21,665**		**$190,329**	**$19,832**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($164,773)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.76%)
B. Actual employer payroll	111,896
C. Payment to transition liability/(surplus)	(7,564)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.76%)
B. Actual employer payroll	104,017
C. Payment to transition liability/(surplus)	(7,032)
4. Supplemental payment to transition liability	0
5. Interest	(12,014)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($162,191)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(162,191)	(164,773)
2. Combined valuation payroll	204,769	232,236
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(7.03%)**	**(6.10%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	204,769	232,236
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Gold Hill/2274
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Gold Hill/2274

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Gold Hill/2274

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Gold Hill -- #2274

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Gold Hill to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Gold Hill.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Gold Hill

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(9.19%)	(9.19%)	(9.19%)	(9.19%)	(9.19%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**4.47%**	**4.47%**	**10.61%**	**1.25%**	**5.35%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**5.03%**	**5.03%**	**11.17%**	**1.73%**	**5.83%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.81%	5.53%	10.58%	1.77%	4.48%
July 1, 2013 to June 30, 2015	5.61%	5.61%	12.27%	3.45%	6.18%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Gold Hill

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$249,865	$386,995
Allocated pre-SLGRP pooled liability/(surplus)	(48,356)	(49,536)
Transition liability/(surplus)	(252,851)	(255,919)
Allocated pooled OPSRP UAL	17,201	4,142
Side account	0	0
Net unfunded pension actuarial accrued liability	(34,141)	85,682
Combined valuation payroll	244,040	242,759
Net pension UAL as a percentage of payroll	(14%)	35%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(9.19%)	(9.07%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,120	$6,289
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$67,280	$3,889
Tier 2 General Service	10.58%	158,870	16,808	10.42%	89,580	9,334
Total General Service		**158,870**	**16,808**		**156,860**	**13,223**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$158,870**	**$16,808**		**$156,860**	**$13,223**
Employer normal cost rate						
General Service			**10.58%**			**8.43%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**8.43%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($255,919)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.84%)
B. Actual employer payroll	125,695
C. Payment to transition liability/(surplus)	(11,111)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.84%)
B. Actual employer payroll	120,882
C. Payment to transition liability/(surplus)	(10,687)
4. Supplemental payment to transition liability	0
5. Interest	(18,730)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($252,851)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(252,851)	(255,919)
2. Combined valuation payroll	244,040	242,759
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.19%)**	**(9.07%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	244,040	242,759
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Gladstone/2304
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Gladstone/2304

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Gladstone/2304

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Gladstone -- #2304

December 2013

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Executive Summary

Milliman has prepared this report for City of Gladstone to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Gladstone.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Gladstone

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.84%	13.50%	16.93%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.78%)	(5.78%)	(5.78%)	(5.78%)	(5.78%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.90%**	**12.56%**	**15.99%**	**6.42%**	**10.52%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.46%**	**13.12%**	**16.55%**	**6.90%**	**11.00%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.25%	8.00%	15.79%	6.52%	9.23%
July 1, 2013 to June 30, 2015	12.02%	9.20%	16.49%	7.67%	10.40%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Gladstone

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,498,276	$3,656,598
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,588,778)	(1,623,959)
Allocated pooled OPSRP UAL	171,980	39,137
Side account	0	0
Net unfunded pension actuarial accrued liability	1,081,478	2,071,776
Combined valuation payroll	2,440,035	2,293,758
Net pension UAL as a percentage of payroll	44%	90%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.78%)	(6.09%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$51,193	$59,421
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$482,648	$76,258	5.78%	$471,415	$27,248
Tier 2 General Service	10.58%	379,838	40,187	10.42%	363,764	37,904
Total General Service		**862,486**	**116,445**		**835,179**	**65,152**
Tier 1 Police & Fire	17.89%	308,719	55,230	15.06%	296,832	44,703
Tier 2 Police & Fire	15.70%	242,208	38,027	15.12%	229,109	34,641
Total Police & Fire		**550,927**	**93,257**		**525,941**	**79,344**
Total		**$1,413,413**	**$209,702**		**$1,361,120**	**$144,496**
Employer normal cost rate						
General Service			**13.50%**			**7.80%**
Police & Fire			**16.93%**			**15.09%**
Aggregate (Default)			**14.84%**			**10.62%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,623,959)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.79%)
B. Actual employer payroll	1,283,630
C. Payment to transition liability/(surplus)	(74,322)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.79%)
B. Actual employer payroll	1,356,594
C. Payment to transition liability/(surplus)	(78,546)
4. Supplemental payment to transition liability	0
5. Interest	(117,687)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,588,778)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,588,778)	(1,623,959)
2. Combined valuation payroll	2,440,035	2,293,758
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.78%)**	**(6.09%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,440,035	2,293,758
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Gaston/2242
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Gaston/2242

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Gaston/2242

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Gaston -- #2242

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Gaston to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Gaston.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Gaston

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(60.43%)	(60.43%)	(60.43%)	(60.43%)	(60.43%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Gaston

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$49,147	$124,897
Allocated pre-SLGRP pooled liability/(surplus)	(9,511)	(15,987)
Transition liability/(surplus)	(326,988)	(310,900)
Allocated pooled OPSRP UAL	3,383	1,337
Side account	0	0
Net unfunded pension actuarial accrued liability	(283,969)	(200,653)
Combined valuation payroll	48,001	78,347
Net pension UAL as a percentage of payroll	(592%)	(256%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(60.43%)	(34.13%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,007	$2,030
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$48,001	$7,584	5.78%	$78,347	$4,528
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**48,001**	**7,584**		**78,347**	**4,528**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$48,001**	**$7,584**		**$78,347**	**$4,528**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($310,900)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(10.28%)
B. Actual employer payroll	41,056
C. Payment to transition liability/(surplus)	(4,221)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(10.28%)
B. Actual employer payroll	38,057
C. Payment to transition liability/(surplus)	(3,912)
4. Supplemental payment to transition liability	0
5. Interest	(24,221)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($326,988)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(326,988)	(310,900)
2. Combined valuation payroll	48,001	78,347
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(60.43%)**	**(34.13%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	48,001	78,347
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Garibaldi/2220
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Garibaldi/2220

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Garibaldi/2220

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Garibaldi -- #2220

December 2013

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Executive Summary

Milliman has prepared this report for City of Garibaldi to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Garibaldi.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Garibaldi

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.55%	13.55%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	2.95%	2.95%	2.95%	2.95%	2.95%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.34%**	**21.34%**	**24.51%**	**15.15%**	**19.25%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.90%**	**21.90%**	**25.07%**	**15.63%**	**19.73%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.11%	17.11%	24.02%	14.79%	17.50%
July 1, 2013 to June 30, 2015	17.37%	17.37%	23.67%	14.85%	17.58%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Garibaldi

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$199,804	$363,530
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	64,800	65,615
Allocated pooled OPSRP UAL	13,754	3,891
Side account	0	0
Net unfunded pension actuarial accrued liability	278,358	433,036
Combined valuation payroll	195,146	228,040
Net pension UAL as a percentage of payroll	143%	190%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	2.95%	2.47%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,094	$5,907
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$52,551	$8,303	5.78%	$49,383	$2,854
Tier 2 General Service	10.58%	39,885	4,220	10.42%	91,204	9,503
Total General Service		**92,436**	**12,523**		**140,587**	**12,357**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$92,436**	**$12,523**		**$140,587**	**$12,357**
Employer normal cost rate						
General Service			**13.55%**			**8.79%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.55%**			**8.79%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$65,615
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.48%
B. Actual employer payroll	117,065
C. Payment to transition liability/(surplus)	2,903
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.48%
B. Actual employer payroll	109,327
C. Payment to transition liability/(surplus)	2,712
4. Supplemental payment to transition liability	0
5. Interest	4,800
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$64,800**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	64,800	65,615
2. Combined valuation payroll	195,146	228,040
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.95%**	**2.47%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	195,146	228,040
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Florence/2291
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Florence/2291

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Florence/2291

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Florence -- #2291

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Florence to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Florence.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Florence

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.63%	13.13%	16.87%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.18%)	(9.18%)	(9.18%)	(9.18%)	(9.18%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.29%**	**8.79%**	**12.53%**	**3.02%**	**7.12%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.85%**	**9.35%**	**13.09%**	**3.50%**	**7.60%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.79%	7.66%	15.37%	6.07%	8.78%
July 1, 2013 to June 30, 2015	8.90%	6.74%	13.65%	4.83%	7.56%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Florence

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,851,421	$5,189,630
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(2,880,484)	(2,856,572)
Allocated pooled OPSRP UAL	196,291	55,545
Side account	0	0
Net unfunded pension actuarial accrued liability	167,228	2,388,603
Combined valuation payroll	2,784,947	3,255,418
Net pension UAL as a percentage of payroll	6%	73%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.18%)	(7.55%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$58,429	$84,333
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$547,905	$86,569	5.78%	$785,866	$45,423
Tier 2 General Service	10.58%	575,122	60,848	10.42%	842,631	87,802
Total General Service		**1,123,027**	**147,417**		**1,628,497**	**133,225**
Tier 1 Police & Fire	17.89%	402,866	72,073	15.06%	388,637	58,529
Tier 2 Police & Fire	15.70%	353,163	55,447	15.12%	350,537	53,001
Total Police & Fire		**756,029**	**127,520**		**739,174**	**111,530**
Total		**$1,879,056**	**$274,937**		**$2,367,671**	**$244,755**
Employer normal cost rate						
General Service			**13.13%**			**8.18%**
Police & Fire			**16.87%**			**15.09%**
Aggregate (Default)			**14.63%**			**10.34%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($2,856,572)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.24%)
B. Actual employer payroll	1,544,277
C. Payment to transition liability/(surplus)	(96,363)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.24%)
B. Actual employer payroll	1,491,874
C. Payment to transition liability/(surplus)	(93,094)
4. Supplemental payment to transition liability	0
5. Interest	(213,369)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($2,880,484)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(2,880,484)	(2,856,572)
2. Combined valuation payroll	2,784,947	3,255,418
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.18%)**	**(7.55%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,784,947	3,255,418
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Falls City/2224
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Falls City/2224

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Falls City/2224

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

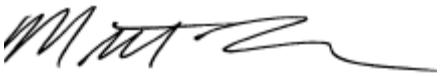
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

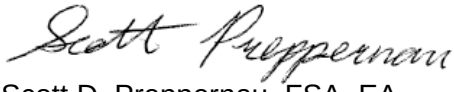
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Falls City -- #2224

December 2013

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Executive Summary

Milliman has prepared this report for City of Falls City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Falls City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Falls City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.20%	12.20%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.46%)	(4.46%)	(4.46%)	(4.46%)	(4.46%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.58%**	**12.58%**	**17.10%**	**7.74%**	**11.84%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.14%**	**13.14%**	**17.66%**	**8.22%**	**12.32%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.85%	7.85%	15.23%	6.00%	8.71%
July 1, 2013 to June 30, 2015	10.31%	10.31%	16.32%	7.50%	10.23%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Falls City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$170,977	$241,887
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(83,997)	(86,040)
Allocated pooled OPSRP UAL	11,770	2,589
Side account	0	0
Net unfunded pension actuarial accrued liability	98,750	158,436
Combined valuation payroll	166,991	151,734
Net pension UAL as a percentage of payroll	59%	104%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.46%)	(4.88%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,504	$3,931
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$41,533	$6,562	5.78%	$42,368	$2,449
Tier 2 General Service	10.58%	92,557	9,793	10.42%	104,434	10,882
Total General Service		**134,090**	**16,355**		**146,802**	**13,331**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$134,090**	**$16,355**		**$146,802**	**$13,331**
Employer normal cost rate						
General Service			**12.20%**			**9.08%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.20%**			**9.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($86,040)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.31%)
B. Actual employer payroll	60,877
C. Payment to transition liability/(surplus)	(3,841)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.31%)
B. Actual employer payroll	70,108
C. Payment to transition liability/(surplus)	(4,424)
4. Supplemental payment to transition liability	0
5. Interest	(6,222)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($83,997)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(83,997)	(86,040)
2. Combined valuation payroll	166,991	151,734
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.46%)**	**(4.88%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	166,991	151,734
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Fairview/2208
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Fairview/2208

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Fairview/2208

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Fairview -- #2208

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Fairview to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Fairview.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Fairview

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.34%	12.03%	16.81%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.37%	4.37%	4.37%	4.37%	4.37%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.80%)	(3.80%)	(3.80%)	(3.80%)	(3.80%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.51%**	**13.20%**	**17.98%**	**8.53%**	**12.63%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.07%**	**13.76%**	**18.54%**	**9.01%**	**13.11%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.49%	11.77%	17.90%	8.57%	11.28%
July 1, 2013 to June 30, 2015	13.75%	12.04%	17.49%	8.68%	11.41%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Fairview

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,359,596	$3,589,830
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(988,310)	(1,001,772)
Allocated pooled OPSRP UAL	162,434	38,422
Side account	0	0
Net unfunded pension actuarial accrued liability	1,533,720	2,626,480
Combined valuation payroll	2,304,588	2,251,875
Net pension UAL as a percentage of payroll	67%	117%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.80%)	(3.83%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$48,351	$58,336
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$242,055	$38,245	5.78%	$141,084	$8,155
Tier 2 General Service	10.58%	626,984	66,335	10.42%	684,503	71,325
Total General Service		**869,039**	**104,580**		**825,587**	**79,480**
Tier 1 Police & Fire	17.89%	165,376	29,586	15.06%	227,726	34,296
Tier 2 Police & Fire	15.70%	159,702	25,073	15.12%	151,279	22,873
Total Police & Fire		**325,078**	**54,659**		**379,005**	**57,169**
Total		**$1,194,117**	**$159,239**		**$1,204,592**	**$136,649**
Employer normal cost rate						
General Service			**12.03%**			**9.63%**
Police & Fire			**16.81%**			**15.08%**
Aggregate (Default)			**13.34%**			**11.34%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,001,772)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.86%)
B. Actual employer payroll	1,158,404
C. Payment to transition liability/(surplus)	(44,714)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.86%)
B. Actual employer payroll	1,086,937
C. Payment to transition liability/(surplus)	(41,956)
4. Supplemental payment to transition liability	0
5. Interest	(73,208)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($988,310)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(988,310)	(1,001,772)
2. Combined valuation payroll	2,304,588	2,251,875
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.80%)**	**(3.83%)**

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,304,588	2,251,875
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Estacada/2179
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Estacada/2179

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Estacada/2179

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Estacada -- #2179

December 2013

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Executive Summary

Milliman has prepared this report for City of Estacada to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Estacada.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Estacada

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.63%	13.63%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.00%	1.00%	1.00%	1.00%	1.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.71%**	**17.71%**	**20.80%**	**11.44%**	**15.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.27%**	**18.27%**	**21.36%**	**11.92%**	**16.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.73%	12.73%	20.96%	11.73%	14.44%
July 1, 2013 to June 30, 2015	13.04%	13.04%	20.38%	11.56%	14.29%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Estacada

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$763,695	$1,278,711
Allocated pre-SLGRP pooled liability/(surplus)	(147,796)	(163,677)
Transition liability/(surplus)	83,696	87,413
Allocated pooled OPSRP UAL	52,572	13,686
Side account	0	0
Net unfunded pension actuarial accrued liability	752,167	1,216,133
Combined valuation payroll	745,891	802,126
Net pension UAL as a percentage of payroll	101%	152%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.00%	0.94%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$15,649	$20,779
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$216,644	$34,230	5.78%	$212,413	$12,277
Tier 2 General Service	10.58%	154,239	16,318	10.42%	156,088	16,264
Total General Service		**370,883**	**50,548**		**368,501**	**28,541**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$370,883**	**$50,548**		**$368,501**	**$28,541**
Employer normal cost rate						
General Service			**13.63%**			**7.75%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.63%**			**7.75%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$87,413
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.12%
B. Actual employer payroll	449,841
C. Payment to transition liability/(surplus)	5,038
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.12%
B. Actual employer payroll	435,603
C. Payment to transition liability/(surplus)	4,879
4. Supplemental payment to transition liability	0
5. Interest	6,200
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$83,696**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	83,696	87,413
2. Combined valuation payroll	745,891	802,126
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.00%**	**0.94%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	745,891	802,126
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Enterprise/2180
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
City of Enterprise/2180

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Enterprise/2180

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Enterprise -- #2180

December 2013

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Executive Summary

Milliman has prepared this report for City of Enterprise to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Enterprise.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Enterprise

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.47%	13.26%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(0.06%)	(0.06%)	(0.06%)	(0.06%)	(0.06%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.25%**	**18.04%**	**22.67%**	**12.14%**	**16.24%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.81%**	**18.60%**	**23.23%**	**12.62%**	**16.72%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.89%	13.90%	21.90%	12.25%	14.96%
July 1, 2013 to June 30, 2015	15.96%	14.14%	21.20%	12.41%	15.14%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Enterprise

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$746,595	$1,112,828
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(4,605)	(4,683)
Allocated pooled OPSRP UAL	51,395	11,911
Side account	0	0
Net unfunded pension actuarial accrued liability	793,385	1,120,056
Combined valuation payroll	729,190	698,069
Net pension UAL as a percentage of payroll	109%	160%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(0.06%)	(0.06%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$15,299	$18,084
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$184,877	$29,211	5.78%	$174,147	$10,066
Tier 2 General Service	10.58%	175,423	18,560	10.42%	159,058	16,574
Total General Service		**360,300**	**47,771**		**333,205**	**26,640**
Tier 1 Police & Fire	17.89%	127,753	22,855	15.06%	116,035	17,475
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**127,753**	**22,855**		**116,035**	**17,475**
Total		**$488,053**	**$70,626**		**$449,240**	**$44,115**
Employer normal cost rate						
General Service			**13.26%**			**8.00%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**14.47%**			**9.82%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($4,683)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.06%)
B. Actual employer payroll	353,434
C. Payment to transition liability/(surplus)	(212)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.06%)
B. Actual employer payroll	346,592
C. Payment to transition liability/(surplus)	(207)
4. Supplemental payment to transition liability	0
5. Interest	(341)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($4,605)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(4,605)	(4,683)
2. Combined valuation payroll	729,190	698,069
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.06%)**	**(0.06%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	729,190	698,069
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Elkton/2305
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Elkton/2305

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Elkton/2305

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Elkton -- #2305

December 2013

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Executive Summary

Milliman has prepared this report for City of Elkton to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Elkton.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Elkton

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.04%	0.04%	0.04%	0.04%	0.04%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.70%**	**13.70%**	**19.84%**	**10.48%**	**14.58%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.26%**	**14.26%**	**20.40%**	**10.96%**	**15.06%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.40%	14.40%	19.87%	10.64%	13.35%
July 1, 2013 to June 30, 2015	14.81%	14.81%	19.48%	10.66%	13.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Elkton

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$63,691	$99,238
Allocated pre-SLGRP pooled liability/(surplus)	(12,326)	(12,703)
Transition liability/(surplus)	258	257
Allocated pooled OPSRP UAL	4,384	1,062
Side account	0	0
Net unfunded pension actuarial accrued liability	56,007	87,854
Combined valuation payroll	62,206	62,251
Net pension UAL as a percentage of payroll	90%	141%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.04%	0.04%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,305	$1,613
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	62,206	6,581	10.42%	62,251	6,487
Total General Service		**62,206**	**6,581**		**62,251**	**6,487**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$62,206**	**$6,581**		**$62,251**	**$6,487**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$257
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.03%
B. Actual employer payroll	29,704
C. Payment to transition liability/(surplus)	9
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.03%
B. Actual employer payroll	30,103
C. Payment to transition liability/(surplus)	9
4. Supplemental payment to transition liability	0
5. Interest	19
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$258**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	258	257
2. Combined valuation payroll	62,206	62,251
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.04%**	**0.04%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	62,206	62,251
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Elgin/2205
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Elgin/2205

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
City of Elgin/2205

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Elgin -- #2205

December 2013

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Executive Summary

Milliman has prepared this report for City of Elgin to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Elgin.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Elgin

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.37%	14.37%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(28.02%)	(28.02%)	(28.02%)	(28.02%)	(28.02%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.97%	0.00%	5.92%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Elgin

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$302,099	$447,937
Allocated pre-SLGRP pooled liability/(surplus)	(58,464)	(57,337)
Transition liability/(surplus)	(931,852)	(894,961)
Allocated pooled OPSRP UAL	20,796	4,794
Side account	0	0
Net unfunded pension actuarial accrued liability	(667,421)	(499,567)
Combined valuation payroll	295,056	280,988
Net pension UAL as a percentage of payroll	(226%)	(178%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(28.02%)	(27.40%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,190	$7,279
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$51,967	$8,211	5.78%	$50,826	$2,938
Tier 2 General Service	10.58%	19,553	2,069	10.42%	18,138	1,890
Total General Service		**71,520**	**10,280**		**68,964**	**4,828**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$71,520**	**$10,280**		**$68,964**	**$4,828**
Employer normal cost rate						
General Service			**14.37%**			**7.00%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.37%**			**7.00%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($894,961)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(14.34%)
B. Actual employer payroll	143,612
C. Payment to transition liability/(surplus)	(16,543)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(14.34%)
B. Actual employer payroll	135,143
C. Payment to transition liability/(surplus)	(15,592)
4. Supplemental payment to transition liability	0
5. Interest	(69,026)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($931,852)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(931,852)	(894,961)
2. Combined valuation payroll	295,056	280,988
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(28.02%)**	**(27.40%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	295,056	280,988
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

December 2013

City of Echo/2225
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Echo/2225

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Echo/2225

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Echo -- #2225

December 2013

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Executive Summary

Milliman has prepared this report for City of Echo to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Echo.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Echo

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.57%	15.57%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	7.78%	7.78%	7.78%	7.78%	7.78%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**26.43%**	**26.43%**	**27.58%**	**18.22%**	**22.32%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**26.99%**	**26.99%**	**28.14%**	**18.70%**	**22.80%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.43%	16.43%	25.99%	16.76%	19.47%
July 1, 2013 to June 30, 2015	16.80%	16.80%	26.11%	17.29%	20.02%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Echo

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$152,620	$277,523
Allocated pre-SLGRP pooled liability/(surplus)	(29,536)	(35,523)
Transition liability/(surplus)	130,719	131,792
Allocated pooled OPSRP UAL	10,506	2,970
Side account	0	0
Net unfunded pension actuarial accrued liability	264,309	376,762
Combined valuation payroll	149,062	174,088
Net pension UAL as a percentage of payroll	177%	216%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	7.78%	6.51%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,127	$4,510
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$117,773	$18,608	5.78%	$108,198	$6,254
Tier 2 General Service	10.58%	5,432	575	10.42%	0	0
Total General Service		**123,205**	**19,183**		**108,198**	**6,254**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$123,205**	**$19,183**		**$108,198**	**$6,254**
Employer normal cost rate						
General Service			**15.57%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.57%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$131,792
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	6.15%
B. Actual employer payroll	87,745
C. Payment to transition liability/(surplus)	5,396
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	6.15%
B. Actual employer payroll	87,153
C. Payment to transition liability/(surplus)	5,360
4. Supplemental payment to transition liability	0
5. Interest	9,683
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$130,719**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	130,719	131,792
2. Combined valuation payroll	149,062	174,088
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**7.78%**	**6.51%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	149,062	174,088
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Durham/2269
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Durham/2269

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Durham/2269

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Durham -- #2269

December 2013

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Executive Summary

Milliman has prepared this report for City of Durham to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Durham.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Durham

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.63%)	(3.63%)	(3.63%)	(3.63%)	(3.63%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.01%**	**17.01%**	**17.93%**	**8.57%**	**12.67%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.57%**	**17.57%**	**18.49%**	**9.05%**	**13.15%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.60%	6.60%	16.16%	6.93%	9.64%
July 1, 2013 to June 30, 2015	7.86%	7.86%	17.17%	8.35%	11.08%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Durham

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$105,240	$144,489
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(42,036)	(44,162)
Allocated pooled OPSRP UAL	7,245	1,546
Side account	0	0
Net unfunded pension actuarial accrued liability	70,449	101,873
Combined valuation payroll	102,787	90,637
Net pension UAL as a percentage of payroll	69%	112%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.63%)	(4.19%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,157	$2,348
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$4,873	$770	5.78%	$3,268	$189
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**4,873**	**770**		**3,268**	**189**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$4,873**	**$770**		**$3,268**	**$189**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($44,162)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.38%)
B. Actual employer payroll	45,546
C. Payment to transition liability/(surplus)	(2,450)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.38%)
B. Actual employer payroll	51,851
C. Payment to transition liability/(surplus)	(2,790)
4. Supplemental payment to transition liability	0
5. Interest	(3,114)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($42,036)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(42,036)	(44,162)
2. Combined valuation payroll	102,787	90,637
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.63%)**	**(4.19%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	102,787	90,637
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Dunes City/2299
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Dunes City/2299

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Dunes City/2299

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Dunes City -- #2299

December 2013

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Executive Summary

Milliman has prepared this report for City of Dunes City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Dunes City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Dunes City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	5.97%	5.97%	5.97%	5.97%	5.97%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**22.98%**	**22.39%**	**25.77%**	**16.41%**	**20.51%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**23.54%**	**22.95%**	**26.33%**	**16.89%**	**20.99%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.42%	14.11%	21.89%	12.66%	15.37%
July 1, 2013 to June 30, 2015	16.95%	15.72%	22.89%	14.07%	16.80%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Dunes City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$39,174	$97,486
Allocated pre-SLGRP pooled liability/(surplus)	(7,581)	(12,478)
Transition liability/(surplus)	25,728	24,560
Allocated pooled OPSRP UAL	2,697	1,043
Side account	0	0
Net unfunded pension actuarial accrued liability	60,018	110,611
Combined valuation payroll	38,261	61,152
Net pension UAL as a percentage of payroll	157%	181%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	5.97%	3.45%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$803	$1,584
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$24,560
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.05%
B. Actual employer payroll	18,000
C. Payment to transition liability/(surplus)	369
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.05%
B. Actual employer payroll	18,000
C. Payment to transition liability/(surplus)	369
4. Supplemental payment to transition liability	0
5. Interest	1,906
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$25,728**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	25,728	24,560
2. Combined valuation payroll	38,261	61,152
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**5.97%**	**3.45%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	38,261	61,152
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Dundee/2245
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Dundee/2245

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Dundee/2245

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Dundee -- #2245

December 2013

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Executive Summary

Milliman has prepared this report for City of Dundee to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Dundee.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Dundee

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.67%	12.71%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.35%)	(3.35%)	(3.35%)	(3.35%)	(3.35%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.16%**	**14.20%**	**19.38%**	**8.85%**	**12.95%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.72%**	**14.76%**	**19.94%**	**9.33%**	**13.43%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.17%	10.75%	18.29%	8.64%	11.35%
July 1, 2013 to June 30, 2015	12.49%	11.26%	17.77%	8.98%	11.71%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Dundee

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$506,001	$761,646
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(186,499)	(190,064)
Allocated pooled OPSRP UAL	34,833	8,152
Side account	0	0
Net unfunded pension actuarial accrued liability	354,335	579,734
Combined valuation payroll	494,205	477,775
Net pension UAL as a percentage of payroll	72%	121%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.35%)	(3.42%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,369	$12,377
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$106,294	$16,794	5.78%	$101,879	$5,889
Tier 2 General Service	10.58%	154,709	16,368	10.42%	151,419	15,778
Total General Service		**261,003**	**33,162**		**253,298**	**21,667**
Tier 1 Police & Fire	17.89%	59,968	10,728	15.06%	58,812	8,857
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**59,968**	**10,728**		**58,812**	**8,857**
Total		**$320,971**	**$43,890**		**$312,110**	**$30,524**
Employer normal cost rate						
General Service			**12.71%**			**8.55%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**13.67%**			**9.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($190,064)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.67%)
B. Actual employer payroll	230,619
C. Payment to transition liability/(surplus)	(8,464)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.67%)
B. Actual employer payroll	242,964
C. Payment to transition liability/(surplus)	(8,916)
4. Supplemental payment to transition liability	0
5. Interest	(13,815)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($186,499)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(186,499)	(190,064)
2. Combined valuation payroll	494,205	477,775
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.35%)**	**(3.42%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	494,205	477,775
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Drain/2131
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Drain/2131

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Drain/2131

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Drain -- #2131

December 2013

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Executive Summary

Milliman has prepared this report for City of Drain to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Drain.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Drain

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.85%	12.85%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.93%**	**15.93%**	**19.80%**	**10.44%**	**14.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.49%**	**16.49%**	**20.36%**	**10.92%**	**15.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.61%	12.61%	19.84%	10.61%	13.32%
July 1, 2013 to June 30, 2015	12.84%	12.84%	19.44%	10.62%	13.35%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Drain

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$466,949	$886,844
Allocated pre-SLGRP pooled liability/(surplus)	(90,367)	(113,517)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	32,145	9,492
Side account	0	0
Net unfunded pension actuarial accrued liability	408,727	782,819
Combined valuation payroll	456,063	556,311
Net pension UAL as a percentage of payroll	90%	141%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,568	$14,412
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$113,856	$17,989	5.78%	$154,595	$8,936
Tier 2 General Service	10.58%	147,637	15,620	10.42%	216,716	22,582
Total General Service		**261,493**	**33,609**		**371,311**	**31,518**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$261,493**	**$33,609**		**$371,311**	**$31,518**
Employer normal cost rate						
General Service			**12.85%**			**8.49%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.85%**			**8.49%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	456,063	556,311
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	456,063	556,311
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Depoe Bay/2294
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Depoe Bay/2294

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Depoe Bay/2294

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Depoe Bay -- #2294

December 2013

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Executive Summary

Milliman has prepared this report for City of Depoe Bay to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Depoe Bay.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Depoe Bay

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.03%	13.03%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.07%)	(0.07%)	(0.07%)	(0.07%)	(0.07%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.04%**	**16.04%**	**19.73%**	**10.37%**	**14.47%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.60%**	**16.60%**	**20.29%**	**10.85%**	**14.95%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.37%	12.37%	19.77%	10.54%	13.25%
July 1, 2013 to June 30, 2015	12.51%	12.51%	19.37%	10.55%	13.28%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Depoe Bay

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$638,672	$952,040
Allocated pre-SLGRP pooled liability/(surplus)	(123,600)	(121,863)
Transition liability/(surplus)	(4,752)	(4,817)
Allocated pooled OPSRP UAL	43,966	10,190
Side account	0	0
Net unfunded pension actuarial accrued liability	554,286	835,550
Combined valuation payroll	623,783	597,208
Net pension UAL as a percentage of payroll	89%	140%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.07%)	(0.07%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$13,087	$15,471
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$213,149	$33,678	5.78%	$206,052	$11,910
Tier 2 General Service	10.58%	241,238	25,523	10.42%	230,949	24,065
Total General Service		**454,387**	**59,201**		**437,001**	**35,975**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$454,387**	**$59,201**		**$437,001**	**$35,975**
Employer normal cost rate						
General Service			**13.03%**			**8.23%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.03%**			**8.23%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($4,817)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.07%)
B. Actual employer payroll	289,000
C. Payment to transition liability/(surplus)	(202)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.07%)
B. Actual employer payroll	307,090
C. Payment to transition liability/(surplus)	(215)
4. Supplemental payment to transition liability	0
5. Interest	(352)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($4,752)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(4,752)	(4,817)
2. Combined valuation payroll	623,783	597,208
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.07%)**	**(0.07%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	623,783	597,208
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Dayton/2252
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Dayton/2252

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Dayton/2252

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Dayton -- #2252

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Dayton to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Dayton.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Dayton

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.68%	12.68%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(9.62%)	(9.62%)	(9.62%)	(9.62%)	(9.62%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**6.14%**	**6.14%**	**10.18%**	**0.82%**	**4.92%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**6.70%**	**6.70%**	**10.74%**	**1.30%**	**5.40%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.99%	5.99%	14.16%	4.93%	7.64%
July 1, 2013 to June 30, 2015	4.33%	4.33%	11.61%	2.79%	5.52%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Dayton

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$263,196	$486,848
Allocated pre-SLGRP pooled liability/(surplus)	(50,935)	(62,317)
Transition liability/(surplus)	(278,648)	(278,165)
Allocated pooled OPSRP UAL	18,118	5,211
Side account	0	0
Net unfunded pension actuarial accrued liability	(48,269)	151,577
Combined valuation payroll	257,060	305,396
Net pension UAL as a percentage of payroll	(19%)	50%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(9.62%)	(7.83%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,393	$7,911
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$81,763	$12,919	5.78%	$151,391	$8,750
Tier 2 General Service	10.58%	121,137	12,816	10.42%	118,175	12,314
Total General Service		**202,900**	**25,735**		**269,566**	**21,064**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$202,900**	**$25,735**		**$269,566**	**$21,064**
Employer normal cost rate						
General Service			**12.68%**			**7.81%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.68%**			**7.81%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($278,165)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.68%)
B. Actual employer payroll	167,031
C. Payment to transition liability/(surplus)	(9,487)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.68%)
B. Actual employer payroll	187,857
C. Payment to transition liability/(surplus)	(10,671)
4. Supplemental payment to transition liability	0
5. Interest	(20,641)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($278,648)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(278,648)	(278,165)
2. Combined valuation payroll	257,060	305,396
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.62%)**	**(7.83%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	257,060	305,396
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Dallas/2202
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Dallas/2202

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Dallas/2202

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Dallas -- #2202

December 2013

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Executive Summary

Milliman has prepared this report for City of Dallas to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Dallas.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Dallas

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.35%	11.86%	17.35%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(0.26%)	(0.26%)	(0.26%)	(0.26%)	(0.26%)
Net pension contribution rate	**17.17%**	**14.68%**	**20.17%**	**10.18%**	**14.28%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.73%**	**15.24%**	**20.73%**	**10.66%**	**14.76%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.59%	12.79%	19.87%	10.40%	13.11%
July 1, 2013 to June 30, 2015	16.20%	13.53%	19.19%	10.39%	13.12%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Dallas

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,426,015	$7,197,238
Allocated pre-SLGRP pooled liability/(surplus)	(856,553)	(921,257)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	304,685	77,033
Side account	126,532	119,973
Net unfunded pension actuarial accrued liability	3,747,615	6,233,041
Combined valuation payroll	4,322,833	4,514,776
Net pension UAL as a percentage of payroll	87%	138%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	(0.26%)	(0.23%)
Allocated pooled RHIA UAL	$90,695	$116,958
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$386,884	$61,128	5.78%	$365,762	$21,141
Tier 2 General Service	10.58%	1,194,151	126,341	10.42%	1,315,156	137,039
Total General Service		**1,581,035**	**187,469**		**1,680,918**	**158,180**
Tier 1 Police & Fire	17.89%	993,859	177,801	15.06%	1,163,673	175,249
Tier 2 Police & Fire	15.70%	323,680	50,818	15.12%	330,691	50,000
Total Police & Fire		**1,317,539**	**228,619**		**1,494,364**	**225,249**
Total		**$2,898,574**	**$416,088**		**$3,175,282**	**$383,429**
Employer normal cost rate						
General Service			**11.86%**			**9.41%**
Police & Fire			**17.35%**			**15.07%**
Aggregate (Default)			**14.35%**			**12.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	4,322,833	4,514,776
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$119,973**	**$119,973**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(9,361)	(9,361)
5. Side account earnings during 2012		16,921	16,921
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$126,532**	**$126,532**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$126,532	$119,973
Side Account 2	0	0
Side Account 3	0	0
Total	**$126,532**	**$119,973**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$126,532	$119,973
2. Combined valuation payroll	4,322,833	4,514,776
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(0.26%)	(0.23%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Creswell/2236
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Creswell/2236

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Creswell/2236

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Creswell -- #2236

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Creswell to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Creswell.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Creswell

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.13%	12.13%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.50%)	(2.50%)	(2.50%)	(2.50%)	(2.50%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.47%**	**14.47%**	**19.06%**	**9.70%**	**13.80%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.03%**	**15.03%**	**19.62%**	**10.18%**	**14.28%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.18%	12.18%	18.98%	9.75%	12.46%
July 1, 2013 to June 30, 2015	12.69%	12.69%	18.73%	9.91%	12.64%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Creswell

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$672,348	$1,041,944
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(185,241)	(187,689)
Allocated pooled OPSRP UAL	46,284	11,152
Side account	0	0
Net unfunded pension actuarial accrued liability	533,391	865,407
Combined valuation payroll	656,674	653,604
Net pension UAL as a percentage of payroll	81%	132%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.50%)	(2.47%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$13,777	$16,932
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$122,185	$19,305	5.78%	$119,494	$6,907
Tier 2 General Service	10.58%	288,991	30,575	10.42%	284,610	29,656
Total General Service		**411,176**	**49,880**		**404,104**	**36,563**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$411,176**	**$49,880**		**$404,104**	**$36,563**
Employer normal cost rate						
General Service			**12.13%**			**9.05%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.13%**			**9.05%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($187,689)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.56%)
B. Actual employer payroll	319,410
C. Payment to transition liability/(surplus)	(8,177)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.56%)
B. Actual employer payroll	312,214
C. Payment to transition liability/(surplus)	(7,993)
4. Supplemental payment to transition liability	0
5. Interest	(13,722)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($185,241)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(185,241)	(187,689)
2. Combined valuation payroll	656,674	653,604
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.50%)**	**(2.47%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	656,674	653,604
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Corvallis/2155
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Corvallis/2155

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Corvallis/2155

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Corvallis -- #2155

December 2013

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Executive Summary

Milliman has prepared this report for City of Corvallis to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Corvallis.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Corvallis

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.74%	13.48%	17.19%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.34%)	(4.34%)	(4.34%)	(4.34%)	(4.34%)
Side account rate relief [2]	(2.37%)	(2.37%)	(2.37%)	(2.37%)	(2.37%)
Net pension contribution rate	**12.87%**	**11.61%**	**15.32%**	**5.49%**	**9.59%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.43%**	**12.17%**	**15.88%**	**5.97%**	**10.07%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.00%	7.31%	15.44%	6.03%	8.74%
July 1, 2013 to June 30, 2015	9.97%	7.51%	14.81%	6.00%	8.73%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Corvallis

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$30,223,143	$47,475,795
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(14,427,745)	(14,596,188)
Allocated pooled OPSRP UAL	2,080,550	508,138
Side account	7,885,794	7,470,097
Net unfunded pension actuarial accrued liability	9,990,154	25,917,648
Combined valuation payroll	29,518,565	29,781,228
Net pension UAL as a percentage of payroll	34%	87%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.34%)	(4.22%)
Side account rate relief	(2.37%)	(2.16%)
Allocated pooled RHIA UAL	$619,312	$771,498
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$7,323,787	$1,157,158	5.78%	$7,894,636	$456,310
Tier 2 General Service	10.58%	5,841,582	618,039	10.42%	5,978,381	622,947
Total General Service		**13,165,369**	**1,775,197**		**13,873,017**	**1,079,257**
Tier 1 Police & Fire	17.89%	4,576,662	818,765	15.06%	4,969,008	748,333
Tier 2 Police & Fire	15.70%	2,158,041	338,812	15.12%	2,107,398	318,639
Total Police & Fire		**6,734,703**	**1,157,577**		**7,076,406**	**1,066,972**
Total		**$19,900,072**	**$2,932,774**		**$20,949,423**	**$2,146,229**
Employer normal cost rate						
General Service			**13.48%**			**7.78%**
Police & Fire			**17.19%**			**15.08%**
Aggregate (Default)			**14.74%**			**10.24%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($14,596,188)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.10%)
B. Actual employer payroll	15,064,228
C. Payment to transition liability/(surplus)	(617,633)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.10%)
B. Actual employer payroll	15,110,515
C. Payment to transition liability/(surplus)	(619,532)
4. Supplemental payment to transition liability	0
5. Interest	(1,068,722)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($14,427,745)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(14,427,745)	(14,596,188)
2. Combined valuation payroll	29,518,565	29,781,228
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.34%)**	**(4.22%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$7,470,097**	**$7,470,097**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(636,117)	(636,117)
5. Side account earnings during 2012		1,052,814	1,052,814
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$7,885,794**	**$7,885,794**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$7,885,794	$7,470,097
Side Account 2	0	0
Side Account 3	0	0
Total	**$7,885,794**	**$7,470,097**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$7,885,794	$7,470,097
2. Combined valuation payroll	29,518,565	29,781,228
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(2.37%)	(2.16%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Coquille/2110
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Coquille/2110

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Coquille/2110

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Coquille -- #2110

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Coquille to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Coquille.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Coquille

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.63%	11.84%	16.35%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.26%	1.26%	1.26%	1.26%	1.26%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.97%**	**16.18%**	**20.69%**	**11.70%**	**15.80%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.53%**	**16.74%**	**21.25%**	**12.18%**	**16.28%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.69%	13.17%	20.67%	11.69%	14.40%
July 1, 2013 to June 30, 2015	16.86%	14.37%	20.63%	11.79%	14.52%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Coquille

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,348,476	$2,216,976
Allocated pre-SLGRP pooled liability/(surplus)	(260,967)	(283,776)
Transition liability/(surplus)	186,731	188,986
Allocated pooled OPSRP UAL	92,829	23,729
Side account	0	0
Net unfunded pension actuarial accrued liability	1,367,069	2,145,915
Combined valuation payroll	1,317,040	1,390,693
Net pension UAL as a percentage of payroll	104%	154%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.26%	1.17%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$27,632	$36,027
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$89,568	$14,152	5.78%	$169,743	$9,811
Tier 2 General Service	10.58%	282,156	29,852	10.42%	333,374	34,738
Total General Service		**371,724**	**44,004**		**503,117**	**44,549**
Tier 1 Police & Fire	17.89%	73,294	13,112	15.06%	71,152	10,715
Tier 2 Police & Fire	15.70%	172,372	27,062	15.12%	260,430	39,377
Total Police & Fire		**245,666**	**40,174**		**331,582**	**50,092**
Total		**$617,390**	**$84,178**		**$834,699**	**$94,641**
Employer normal cost rate						
General Service			**11.84%**			**8.85%**
Police & Fire			**16.35%**			**15.11%**
Aggregate (Default)			**13.63%**			**11.34%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$188,986
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.08%
B. Actual employer payroll	715,414
C. Payment to transition liability/(surplus)	7,726
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.08%
B. Actual employer payroll	774,086
C. Payment to transition liability/(surplus)	8,361
4. Supplemental payment to transition liability	0
5. Interest	13,832
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$186,731**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	186,731	188,986
2. Combined valuation payroll	1,317,040	1,390,693
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.26%**	**1.17%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,317,040	1,390,693
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Condon/2177
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Condon/2177

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Condon/2177

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Condon -- #2177

December 2013

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Executive Summary

Milliman has prepared this report for City of Condon to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Condon.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Condon

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.98%	10.83%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	7.75%	7.75%	7.75%	7.75%	7.75%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**24.57%**	**23.42%**	**28.29%**	**19.95%**	**24.05%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**25.13%**	**23.98%**	**28.85%**	**20.43%**	**24.53%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	27.11%	25.83%	30.88%	22.07%	24.78%
July 1, 2013 to June 30, 2015	25.88%	24.70%	29.40%	20.55%	23.28%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Condon

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$267,801	$398,245
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	228,561	237,416
Allocated pooled OPSRP UAL	18,435	4,262
Side account	0	0
Net unfunded pension actuarial accrued liability	514,797	639,923
Combined valuation payroll	261,558	249,816
Net pension UAL as a percentage of payroll	197%	256%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	7.75%	8.17%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,488	$6,472
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$7,192	$1,136	5.78%	$0	$0
Tier 2 General Service	10.58%	143,581	15,191	10.42%	139,543	14,540
Total General Service		**150,773**	**16,327**		**139,543**	**14,540**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	46,541	7,307	15.12%	46,908	7,092
Total Police & Fire		**46,541**	**7,307**		**46,908**	**7,092**
Total		**$197,314**	**$23,634**		**$186,451**	**$21,632**
Employer normal cost rate						
General Service			**10.83%**			**10.42%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**11.98%**			**11.60%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$237,416
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	9.76%
B. Actual employer payroll	126,546
C. Payment to transition liability/(surplus)	12,351
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	9.76%
B. Actual employer payroll	137,641
C. Payment to transition liability/(surplus)	13,434
4. Supplemental payment to transition liability	0
5. Interest	16,930
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$228,561**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	228,561	237,416
2. Combined valuation payroll	261,558	249,816
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**7.75%**	**8.17%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	261,558	249,816
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Columbia City/2271
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Columbia City/2271

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Columbia City/2271

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Columbia City -- #2271

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Columbia City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Columbia City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Columbia City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.78%	15.80%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.07%)	(0.07%)	(0.07%)	(0.07%)	(0.07%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.79%**	**18.81%**	**18.71%**	**10.37%**	**14.47%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.35%**	**19.37%**	**19.27%**	**10.85%**	**14.95%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.08%	10.29%	19.32%	10.51%	13.22%
July 1, 2013 to June 30, 2015	12.21%	10.05%	19.39%	10.54%	13.27%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Columbia City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$459,461	$668,732
Allocated pre-SLGRP pooled liability/(surplus)	(88,918)	(85,599)
Transition liability/(surplus)	(3,429)	(3,662)
Allocated pooled OPSRP UAL	31,629	7,158
Side account	0	0
Net unfunded pension actuarial accrued liability	398,743	586,629
Combined valuation payroll	448,750	419,491
Net pension UAL as a percentage of payroll	89%	140%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.07%)	(0.08%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,415	$10,867
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$144,114	$22,770	5.78%	$130,657	$7,552
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**144,114**	**22,770**		**130,657**	**7,552**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	39,910	6,266	15.12%	39,316	5,945
Total Police & Fire		**39,910**	**6,266**		**39,316**	**5,945**
Total		**$184,024**	**$29,036**		**$169,973**	**$13,497**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.78%**			**7.94%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,662)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.10%)
B. Actual employer payroll	236,320
C. Payment to transition liability/(surplus)	(236)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.10%)
B. Actual employer payroll	251,524
C. Payment to transition liability/(surplus)	(251)
4. Supplemental payment to transition liability	0
5. Interest	(254)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($3,429)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,429)	(3,662)
2. Combined valuation payroll	448,750	419,491
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.07%)**	**(0.08%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	448,750	419,491
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Coburg/2201
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Coburg/2201

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Coburg/2201

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Coburg -- #2201

December 2013

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Executive Summary

Milliman has prepared this report for City of Coburg to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Coburg.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Coburg

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.82%	10.58%	16.62%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(8.85%)	(8.85%)	(8.85%)	(8.85%)	(8.85%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**8.81%**	**6.57%**	**12.61%**	**3.35%**	**7.45%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**9.37%**	**7.13%**	**13.17%**	**3.83%**	**7.93%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.62%	2.24%	8.14%	0.00%	2.04%
July 1, 2013 to June 30, 2015	8.97%	7.89%	12.92%	4.10%	6.83%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Coburg

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$635,160	$1,022,578
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(618,516)	(648,677)
Allocated pooled OPSRP UAL	43,724	10,945
Side account	0	0
Net unfunded pension actuarial accrued liability	60,368	384,846
Combined valuation payroll	620,353	641,456
Net pension UAL as a percentage of payroll	10%	60%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(8.85%)	(8.70%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$13,015	$16,617
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$29,638	$1,713
Tier 2 General Service	10.58%	270,960	28,668	10.42%	350,151	36,486
Total General Service		**270,960**	**28,668**		**379,789**	**38,199**
Tier 1 Police & Fire	17.89%	67,229	12,027	15.06%	56,760	8,548
Tier 2 Police & Fire	15.70%	92,248	14,483	15.12%	47,895	7,242
Total Police & Fire		**159,477**	**26,510**		**104,655**	**15,790**
Total		**$430,437**	**$55,178**		**$484,444**	**$53,989**
Employer normal cost rate						
General Service			**10.58%**			**10.06%**
Police & Fire			**16.62%**			**15.09%**
Aggregate (Default)			**12.82%**			**11.14%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($648,677)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(12.98%)
B. Actual employer payroll	293,747
C. Payment to transition liability/(surplus)	(37,703)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(12.98%)
B. Actual employer payroll	298,193
C. Payment to transition liability/(surplus)	(38,274)
4. Supplemental payment to transition liability	0
5. Interest	(45,816)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($618,516)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(618,516)	(648,677)
2. Combined valuation payroll	620,353	641,456
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.85%)**	**(8.70%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	620,353	641,456
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Central Point/2181
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
City of Central Point/2181

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Central Point/2181

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Central Point -- #2181

December 2013

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Executive Summary

Milliman has prepared this report for City of Central Point to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Central Point.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Central Point

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.73%	12.47%	16.58%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.80%)	(2.80%)	(2.80%)	(2.80%)	(2.80%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.77%**	**14.51%**	**18.62%**	**9.40%**	**13.50%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.33%**	**15.07%**	**19.18%**	**9.88%**	**13.98%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.94%	11.44%	18.50%	9.29%	12.00%
July 1, 2013 to June 30, 2015	14.49%	12.27%	18.58%	9.76%	12.49%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Central Point

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$4,064,231	$6,782,441
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,254,203)	(1,297,699)
Allocated pooled OPSRP UAL	279,780	72,593
Side account	0	0
Net unfunded pension actuarial accrued liability	3,089,808	5,557,335
Combined valuation payroll	3,969,483	4,254,577
Net pension UAL as a percentage of payroll	78%	131%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.80%)	(2.62%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$83,281	$110,217
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$651,782	$102,982	5.78%	$706,273	$40,823
Tier 2 General Service	10.58%	1,145,984	121,245	10.42%	1,292,968	134,727
Total General Service		**1,797,766**	**224,227**		**1,999,241**	**175,550**
Tier 1 Police & Fire	17.89%	318,630	57,003	15.06%	508,772	76,621
Tier 2 Police & Fire	15.70%	476,760	74,851	15.12%	572,801	86,608
Total Police & Fire		**795,390**	**131,854**		**1,081,573**	**163,229**
Total		**$2,593,156**	**$356,081**		**$3,080,814**	**$338,779**
Employer normal cost rate						
General Service			**12.47%**			**8.78%**
Police & Fire			**16.58%**			**15.09%**
Aggregate (Default)			**13.73%**			**11.00%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,297,699)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.02%)
B. Actual employer payroll	2,264,360
C. Payment to transition liability/(surplus)	(68,384)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.02%)
B. Actual employer payroll	2,252,217
C. Payment to transition liability/(surplus)	(68,016)
4. Supplemental payment to transition liability	0
5. Interest	(92,904)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($1,254,203)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,254,203)	(1,297,699)
2. Combined valuation payroll	3,969,483	4,254,577
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.80%)**	**(2.62%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,969,483	4,254,577
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Cave Junction/2194
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Cave Junction/2194

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Cave Junction/2194

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Cave Junction -- #2194

December 2013

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Executive Summary

Milliman has prepared this report for City of Cave Junction to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Cave Junction.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Cave Junction

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.06%	14.06%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.08%)	(1.08%)	(1.08%)	(1.08%)	(1.08%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.06%**	**16.06%**	**18.72%**	**9.36%**	**13.46%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.62%**	**16.62%**	**19.28%**	**9.84%**	**13.94%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.29%	10.29%	18.69%	9.46%	12.17%
July 1, 2013 to June 30, 2015	10.56%	10.56%	18.31%	9.49%	12.22%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Cave Junction

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$467,605	$688,125
Allocated pre-SLGRP pooled liability/(surplus)	(90,494)	(88,081)
Transition liability/(surplus)	(55,717)	(56,595)
Allocated pooled OPSRP UAL	32,190	7,365
Side account	0	0
Net unfunded pension actuarial accrued liability	353,584	550,814
Combined valuation payroll	456,704	431,656
Net pension UAL as a percentage of payroll	77%	128%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.08%)	(1.13%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,582	$11,182
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$194,126	$30,672	5.78%	$186,317	$10,769
Tier 2 General Service	10.58%	97,459	10,311	10.42%	94,770	9,875
Total General Service		**291,585**	**40,983**		**281,087**	**20,644**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$291,585**	**$40,983**		**$281,087**	**$20,644**
Employer normal cost rate						
General Service			**14.06%**			**7.34%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.06%**			**7.34%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($56,595)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.15%)
B. Actual employer payroll	213,232
C. Payment to transition liability/(surplus)	(2,452)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.15%)
B. Actual employer payroll	221,980
C. Payment to transition liability/(surplus)	(2,553)
4. Supplemental payment to transition liability	0
5. Interest	(4,127)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($55,717)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(55,717)	(56,595)
2. Combined valuation payroll	456,704	431,656
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.08%)**	**(1.13%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	456,704	431,656
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Cascade Locks/2182
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Cascade Locks/2182

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Cascade Locks/2182

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Cascade Locks -- #2182

December 2013

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Executive Summary

Milliman has prepared this report for City of Cascade Locks to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Cascade Locks.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Cascade Locks

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	7.49%	7.49%	7.49%	7.49%	7.49%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**26.37%**	**26.37%**	**27.29%**	**17.93%**	**22.03%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**26.93%**	**26.93%**	**27.85%**	**18.41%**	**22.51%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.47%	16.40%	25.54%	16.73%	19.44%
July 1, 2013 to June 30, 2015	18.08%	17.24%	26.58%	17.73%	20.46%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Cascade Locks

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$670,886	$1,126,989
Allocated pre-SLGRP pooled liability/(surplus)	(129,835)	(144,256)
Transition liability/(surplus)	553,449	552,254
Allocated pooled OPSRP UAL	46,184	12,062
Side account	0	0
Net unfunded pension actuarial accrued liability	1,140,684	1,547,049
Combined valuation payroll	655,246	706,952
Net pension UAL as a percentage of payroll	174%	219%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	7.49%	6.72%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$13,747	$18,314
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$436,401	$68,951	5.78%	$421,835	$24,382
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**436,401**	**68,951**		**421,835**	**24,382**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	41,937	6,341
Total Police & Fire		**0**	**0**		**41,937**	**6,341**
Total		**$436,401**	**$68,951**		**$463,772**	**$30,723**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.12%**
Aggregate (Default)			**15.80%**			**6.62%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$552,254
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	6.12%
B. Actual employer payroll	312,025
C. Payment to transition liability/(surplus)	19,096
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	6.12%
B. Actual employer payroll	338,309
C. Payment to transition liability/(surplus)	20,705
4. Supplemental payment to transition liability	0
5. Interest	40,996
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$553,449**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	553,449	552,254
2. Combined valuation payroll	655,246	706,952
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**7.49%**	**6.72%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	655,246	706,952
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Carlton/2198
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Carlton/2198

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Carlton/2198

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Carlton -- #2198

December 2013

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Executive Summary

Milliman has prepared this report for City of Carlton to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Carlton.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Carlton

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.24%	11.73%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(13.00%)	(13.00%)	(13.00%)	(13.00%)	(13.00%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**5.08%**	**3.57%**	**9.73%**	**0.00%**	**3.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**5.64%**	**4.13%**	**10.29%**	**0.48%**	**3.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.29%	3.94%	11.10%	1.45%	4.16%
July 1, 2013 to June 30, 2015	0.00%	0.00%	6.53%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Carlton

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$431,605	$483,592
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(617,631)	(616,605)
Allocated pooled OPSRP UAL	29,712	5,176
Side account	0	0
Net unfunded pension actuarial accrued liability	(156,314)	(127,837)
Combined valuation payroll	421,543	303,354
Net pension UAL as a percentage of payroll	(37%)	(42%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(13.00%)	(17.48%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,844	$7,859
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$50,478	$7,976	5.78%	$48,055	$2,778
Tier 2 General Service	10.58%	178,881	18,926	10.42%	97,169	10,125
Total General Service		**229,359**	**26,902**		**145,224**	**12,903**
Tier 1 Police & Fire	17.89%	74,849	13,390	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	50	8
Total Police & Fire		**74,849**	**13,390**		**50**	**8**
Total		**$304,208**	**$40,292**		**$145,274**	**$12,911**
Employer normal cost rate						
General Service			**11.73%**			**8.88%**
Police & Fire			**17.89%**			**16.00%**
Aggregate (Default)			**13.24%**			**8.89%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($616,605)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(10.86%)
B. Actual employer payroll	196,232
C. Payment to transition liability/(surplus)	(21,311)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(10.86%)
B. Actual employer payroll	215,595
C. Payment to transition liability/(surplus)	(23,413)
4. Supplemental payment to transition liability	0
5. Interest	(45,750)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($617,631)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(617,631)	(616,605)
2. Combined valuation payroll	421,543	303,354
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(13.00%)**	**(17.48%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	421,543	303,354
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Cannon Beach/2223
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Cannon Beach/2223

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
City of Cannon Beach/2223

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Cannon Beach -- #2223

December 2013

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Executive Summary

Milliman has prepared this report for City of Cannon Beach to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Cannon Beach.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Cannon Beach

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.62%	13.06%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.62%)	(2.62%)	(2.62%)	(2.62%)	(2.62%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.08%**	**13.52%**	**16.16%**	**7.82%**	**11.92%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.64%**	**14.08%**	**16.72%**	**8.30%**	**12.40%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.92%	9.74%	17.13%	8.32%	11.03%
July 1, 2013 to June 30, 2015	11.79%	10.56%	17.73%	8.88%	11.61%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Cannon Beach

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,604,598	$2,651,653
Allocated pre-SLGRP pooled liability/(surplus)	(310,533)	(339,416)
Transition liability/(surplus)	(461,998)	(469,889)
Allocated pooled OPSRP UAL	110,460	28,381
Side account	0	0
Net unfunded pension actuarial accrued liability	942,527	1,870,729
Combined valuation payroll	1,567,191	1,663,363
Net pension UAL as a percentage of payroll	60%	112%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.62%)	(2.43%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$32,880	$43,090
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$333,356	$52,670	5.78%	$466,629	$26,971
Tier 2 General Service	10.58%	369,012	39,041	10.42%	408,368	42,552
Total General Service		**702,368**	**91,711**		**874,997**	**69,523**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	192,114	30,162	15.12%	181,635	27,463
Total Police & Fire		**192,114**	**30,162**		**181,635**	**27,463**
Total		**$894,482**	**$121,873**		**$1,056,632**	**$96,986**
Employer normal cost rate						
General Service			**13.06%**			**7.95%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**13.62%**			**9.18%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($469,889)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.29%)
B. Actual employer payroll	861,129
C. Payment to transition liability/(surplus)	(19,720)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.29%)
B. Actual employer payroll	977,860
C. Payment to transition liability/(surplus)	(22,393)
4. Supplemental payment to transition liability	0
5. Interest	(34,222)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($461,998)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(461,998)	(469,889)
2. Combined valuation payroll	1,567,191	1,663,363
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.62%)**	**(2.43%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,567,191	1,663,363
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Canby/2109
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Canby/2109

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Canby/2109

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Canby -- #2109

December 2013

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Executive Summary

Milliman has prepared this report for City of Canby to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Canby.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Canby

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.57%	13.11%	16.86%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.76%)	(5.76%)	(5.76%)	(5.76%)	(5.76%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.65%**	**12.19%**	**15.94%**	**6.44%**	**10.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.21%**	**12.75%**	**16.50%**	**6.92%**	**11.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.11%	8.00%	15.67%	6.42%	9.13%
July 1, 2013 to June 30, 2015	11.37%	8.67%	15.94%	7.12%	9.85%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Canby

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,946,867	$9,224,398
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,768,322)	(3,837,789)
Allocated pooled OPSRP UAL	409,380	98,730
Side account	0	0
Net unfunded pension actuarial accrued liability	2,587,925	5,485,339
Combined valuation payroll	5,808,230	5,786,399
Net pension UAL as a percentage of payroll	45%	95%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.76%)	(5.70%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$121,859	$149,900
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,046,001	$165,268	5.78%	$1,365,259	$78,912
Tier 2 General Service	10.58%	1,112,999	117,755	10.42%	1,066,754	111,156
Total General Service		**2,159,000**	**283,023**		**2,432,013**	**190,068**
Tier 1 Police & Fire	17.89%	731,794	130,918	15.06%	803,409	120,993
Tier 2 Police & Fire	15.70%	649,625	101,991	15.12%	635,405	96,073
Total Police & Fire		**1,381,419**	**232,909**		**1,438,814**	**217,066**
Total		**$3,540,419**	**$515,932**		**$3,870,827**	**$407,134**
Employer normal cost rate						
General Service			**13.11%**			**7.82%**
Police & Fire			**16.86%**			**15.09%**
Aggregate (Default)			**14.57%**			**10.52%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,837,789)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.89%)
B. Actual employer payroll	2,889,457
C. Payment to transition liability/(surplus)	(170,189)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.89%)
B. Actual employer payroll	3,029,078
C. Payment to transition liability/(surplus)	(178,413)
4. Supplemental payment to transition liability	0
5. Interest	(279,135)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($3,768,322)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,768,322)	(3,837,789)
2. Combined valuation payroll	5,808,230	5,786,399
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.76%)**	**(5.70%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	5,808,230	5,786,399
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Burns/2204
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Burns/2204

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
City of Burns/2204

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Burns -- #2204

December 2013

Secondary Employers

2108 City of Burns

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Executive Summary

Milliman has prepared this report for City of Burns to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Burns.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Burns

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.69%	14.22%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(6.59%)	(6.59%)	(6.59%)	(6.59%)	(6.59%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.94%**	**12.47%**	**16.14%**	**5.61%**	**9.71%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.50%**	**13.03%**	**16.70%**	**6.09%**	**10.19%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.46%	6.46%	14.48%	5.25%	7.96%
July 1, 2013 to June 30, 2015	8.24%	7.27%	15.17%	6.38%	9.11%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Burns

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$611,992	$1,045,040
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(444,256)	(457,274)
Allocated pooled OPSRP UAL	42,129	11,185
Side account	0	0
Net unfunded pension actuarial accrued liability	209,865	598,951
Combined valuation payroll	597,725	655,546
Net pension UAL as a percentage of payroll	35%	91%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(6.59%)	(6.00%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$12,541	$16,982
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$149,178	$23,570	5.78%	$154,128	$8,909
Tier 2 General Service	10.58%	64,481	6,822	10.42%	65,301	6,804
Total General Service		**213,659**	**30,392**		**219,429**	**15,713**
Tier 1 Police & Fire	17.89%	31,245	5,590	15.06%	30,641	4,615
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**31,245**	**5,590**		**30,641**	**4,615**
Total		**$244,904**	**$35,982**		**$250,070**	**$20,328**
Employer normal cost rate						
General Service			**14.22%**			**7.16%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**14.69%**			**8.13%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($457,274)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.06%)
B. Actual employer payroll	339,485
C. Payment to transition liability/(surplus)	(23,968)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.06%)
B. Actual employer payroll	311,024
C. Payment to transition liability/(surplus)	(21,958)
4. Supplemental payment to transition liability	0
5. Interest	(32,908)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($444,256)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(444,256)	(457,274)
2. Combined valuation payroll	597,725	655,546
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.59%)**	**(6.00%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	597,725	655,546
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Brookings/2216
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Brookings/2216

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Brookings/2216

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Brookings -- #2216

December 2013

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Executive Summary

Milliman has prepared this report for City of Brookings to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Brookings.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Brookings

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.87%	12.11%	16.18%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.88%)	(0.88%)	(0.88%)	(0.88%)	(0.88%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.07%**	**14.31%**	**18.38%**	**9.56%**	**13.66%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.63%**	**14.87%**	**18.94%**	**10.04%**	**14.14%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.19%	11.50%	18.94%	9.70%	12.41%
July 1, 2013 to June 30, 2015	14.46%	11.96%	18.49%	9.66%	12.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Brookings

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,635,300	$3,673,836
Allocated pre-SLGRP pooled liability/(surplus)	(510,002)	(470,256)
Transition liability/(surplus)	(254,502)	(258,314)
Allocated pooled OPSRP UAL	181,413	39,321
Side account	0	0
Net unfunded pension actuarial accrued liability	2,052,209	2,984,587
Combined valuation payroll	2,573,864	2,304,571
Net pension UAL as a percentage of payroll	80%	130%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.88%)	(0.96%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$54,001	$59,701
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$180,127	$28,460	5.78%	$333,575	$19,281
Tier 2 General Service	10.58%	434,051	45,923	10.42%	503,771	52,493
Total General Service		**614,178**	**74,383**		**837,346**	**71,774**
Tier 1 Police & Fire	17.89%	102,571	18,350	15.06%	169,051	25,459
Tier 2 Police & Fire	15.70%	362,466	56,907	15.12%	350,499	52,995
Total Police & Fire		**465,037**	**75,257**		**519,550**	**78,454**
Total		**$1,079,215**	**$149,640**		**$1,356,896**	**$150,228**
Employer normal cost rate						
General Service			**12.11%**			**8.57%**
Police & Fire			**16.18%**			**15.10%**
Aggregate (Default)			**13.87%**			**11.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($258,314)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.91%)
B. Actual employer payroll	1,200,894
C. Payment to transition liability/(surplus)	(10,928)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.91%)
B. Actual employer payroll	1,289,646
C. Payment to transition liability/(surplus)	(11,736)
4. Supplemental payment to transition liability	0
5. Interest	(18,852)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($254,502)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(254,502)	(258,314)
2. Combined valuation payroll	2,573,864	2,304,571
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.88%)**	**(0.96%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,573,864	2,304,571
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Boardman/2178
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
City of Boardman/2178

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Boardman/2178

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Boardman -- #2178

December 2013

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Executive Summary

Milliman has prepared this report for City of Boardman to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Boardman.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Boardman

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.12%	13.23%	17.20%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.44%)	(0.44%)	(0.44%)	(0.44%)	(0.44%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.76%**	**15.87%**	**19.84%**	**10.00%**	**14.10%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.32%**	**16.43%**	**20.40%**	**10.48%**	**14.58%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.09%	11.86%	19.60%	10.15%	12.86%
July 1, 2013 to June 30, 2015	14.07%	12.47%	19.44%	10.63%	13.36%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Boardman

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,336,798	$1,823,185
Allocated pre-SLGRP pooled liability/(surplus)	(258,707)	(233,370)
Transition liability/(surplus)	(64,150)	(65,182)
Allocated pooled OPSRP UAL	92,025	19,514
Side account	0	0
Net unfunded pension actuarial accrued liability	1,105,966	1,544,147
Combined valuation payroll	1,305,634	1,143,671
Net pension UAL as a percentage of payroll	85%	135%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.44%)	(0.49%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$27,393	$29,627
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$309,012	$48,824	5.78%	$302,818	$17,503
Tier 2 General Service	10.58%	298,939	31,628	10.42%	306,736	31,962
Total General Service		**607,951**	**80,452**		**609,554**	**49,465**
Tier 1 Police & Fire	17.89%	120,769	21,606	15.06%	118,245	17,808
Tier 2 Police & Fire	15.70%	55,373	8,694	15.12%	62,206	9,406
Total Police & Fire		**176,142**	**30,300**		**180,451**	**27,214**
Total		**$784,093**	**$110,752**		**$790,005**	**$76,679**
Employer normal cost rate						
General Service			**13.23%**			**8.11%**
Police & Fire			**17.20%**			**15.08%**
Aggregate (Default)			**14.12%**			**9.71%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($65,182)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.46%)
B. Actual employer payroll	620,470
C. Payment to transition liability/(surplus)	(2,854)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.46%)
B. Actual employer payroll	636,859
C. Payment to transition liability/(surplus)	(2,930)
4. Supplemental payment to transition liability	0
5. Interest	(4,752)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($64,150)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(64,150)	(65,182)
2. Combined valuation payroll	1,305,634	1,143,671
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.44%)**	**(0.49%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,305,634	1,143,671
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Bay City/2241
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Bay City/2241

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Bay City/2241

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Bay City -- #2241

December 2013

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Executive Summary

Milliman has prepared this report for City of Bay City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Bay City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Bay City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(3.52%)	(3.52%)	(3.52%)	(3.52%)	(3.52%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.14%**	**10.14%**	**16.28%**	**6.92%**	**11.02%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.70%**	**10.70%**	**16.84%**	**7.40%**	**11.50%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.24%	9.24%	16.67%	7.44%	10.15%
July 1, 2013 to June 30, 2015	10.79%	10.79%	15.46%	6.64%	9.37%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Bay City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$336,849	$450,882
Allocated pre-SLGRP pooled liability/(surplus)	(65,189)	(57,714)
Transition liability/(surplus)	(130,493)	(131,005)
Allocated pooled OPSRP UAL	23,189	4,826
Side account	0	0
Net unfunded pension actuarial accrued liability	164,356	266,989
Combined valuation payroll	328,996	282,835
Net pension UAL as a percentage of payroll	50%	94%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(3.52%)	(3.98%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,902	$7,327
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	56,000	5,925	10.42%	54,682	5,698
Total General Service		**56,000**	**5,925**		**54,682**	**5,698**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$56,000**	**$5,925**		**$54,682**	**$5,698**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($131,005)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.17%)
B. Actual employer payroll	153,320
C. Payment to transition liability/(surplus)	(4,860)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.17%)
B. Actual employer payroll	167,789
C. Payment to transition liability/(surplus)	(5,318)
4. Supplemental payment to transition liability	0
5. Interest	(9,666)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($130,493)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(130,493)	(131,005)
2. Combined valuation payroll	328,996	282,835
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.52%)**	**(3.98%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	328,996	282,835
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Banks/2231
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Banks/2231

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Banks/2231

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Banks -- #2231

December 2013

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Executive Summary

Milliman has prepared this report for City of Banks to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Banks.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Banks

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(10.47%)	(10.47%)	(10.47%)	(10.47%)	(10.47%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**4.95%**	**4.95%**	**11.09%**	**1.73%**	**5.83%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**5.51%**	**5.51%**	**11.65%**	**2.21%**	**6.31%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.50%	6.50%	11.97%	2.74%	5.45%
July 1, 2013 to June 30, 2015	7.24%	7.24%	11.91%	3.09%	5.82%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Banks

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$290,352	$507,320
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(334,782)	(343,628)
Allocated pooled OPSRP UAL	19,988	5,430
Side account	0	0
Net unfunded pension actuarial accrued liability	(24,442)	169,122
Combined valuation payroll	283,583	318,238
Net pension UAL as a percentage of payroll	(9%)	53%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(10.47%)	(9.29%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,950	$8,244
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	72,666	7,688	10.42%	153,312	15,975
Total General Service		**72,666**	**7,688**		**153,312**	**15,975**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$72,666**	**$7,688**		**$153,312**	**$15,975**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($343,628)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.57%)
B. Actual employer payroll	169,837
C. Payment to transition liability/(surplus)	(16,253)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.57%)
B. Actual employer payroll	181,737
C. Payment to transition liability/(surplus)	(17,392)
4. Supplemental payment to transition liability	0
5. Interest	(24,799)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($334,782)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(334,782)	(343,628)
2. Combined valuation payroll	283,583	318,238
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(10.47%)**	**(9.29%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	283,583	318,238
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Bandon/2150
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Bandon/2150

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Bandon/2150

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Bandon -- #2150

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Bandon to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Bandon.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Bandon

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.64%	13.19%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.24%)	(0.24%)	(0.24%)	(0.24%)	(0.24%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.48%**	**16.03%**	**18.54%**	**10.20%**	**14.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.04%**	**16.59%**	**19.10%**	**10.68%**	**14.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.15%	12.00%	19.19%	10.38%	13.09%
July 1, 2013 to June 30, 2015	13.35%	12.15%	19.24%	10.39%	13.12%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Bandon

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,113,015	$3,268,486
Allocated pre-SLGRP pooled liability/(surplus)	(408,925)	(418,371)
Transition liability/(surplus)	(54,875)	(55,520)
Allocated pooled OPSRP UAL	145,459	34,983
Side account	0	0
Net unfunded pension actuarial accrued liability	1,794,674	2,829,578
Combined valuation payroll	2,063,755	2,050,298
Net pension UAL as a percentage of payroll	87%	138%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.24%)	(0.23%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$43,298	$53,114
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$760,904	$120,223	5.78%	$797,007	$46,067
Tier 2 General Service	10.58%	763,720	80,802	10.42%	751,249	78,280
Total General Service		**1,524,624**	**201,025**		**1,548,256**	**124,347**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	332,110	52,141	15.12%	315,913	47,766
Total Police & Fire		**332,110**	**52,141**		**315,913**	**47,766**
Total		**$1,856,734**	**$253,166**		**$1,864,169**	**$172,113**
Employer normal cost rate						
General Service			**13.19%**			**8.03%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**13.64%**			**9.23%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($55,520)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.23%)
B. Actual employer payroll	1,004,003
C. Payment to transition liability/(surplus)	(2,309)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.23%)
B. Actual employer payroll	1,043,570
C. Payment to transition liability/(surplus)	(2,401)
4. Supplemental payment to transition liability	0
5. Interest	(4,065)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($54,875)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(54,875)	(55,520)
2. Combined valuation payroll	2,063,755	2,050,298
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.24%)**	**(0.23%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,063,755	2,050,298
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Baker City/2159
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Baker City/2159

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Baker City/2159

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Baker City -- #2159

December 2013

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Executive Summary

Milliman has prepared this report for City of Baker City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Baker City.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Baker City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.75%	13.08%	16.58%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.37%)	(0.37%)	(0.37%)	(0.37%)	(0.37%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.46%**	**15.79%**	**19.29%**	**10.07%**	**14.17%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.02%**	**16.35%**	**19.85%**	**10.55%**	**14.65%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.45%	12.10%	19.40%	10.27%	12.98%
July 1, 2013 to June 30, 2015	15.57%	12.18%	19.08%	10.25%	12.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Baker City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,633,829	$5,488,900
Allocated pre-SLGRP pooled liability/(surplus)	(703,244)	(702,587)
Transition liability/(surplus)	(146,528)	(147,896)
Allocated pooled OPSRP UAL	250,151	58,748
Side account	0	0
Net unfunded pension actuarial accrued liability	3,034,208	4,697,165
Combined valuation payroll	3,549,115	3,443,148
Net pension UAL as a percentage of payroll	85%	136%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.37%)	(0.37%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$74,462	$89,196
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$561,881	$88,777	5.78%	$547,172	$31,627
Tier 2 General Service	10.58%	612,837	64,838	10.42%	598,183	62,331
Total General Service		**1,174,718**	**153,615**		**1,145,355**	**93,958**
Tier 1 Police & Fire	17.89%	432,334	77,345	15.06%	403,055	60,700
Tier 2 Police & Fire	15.70%	643,368	101,009	15.12%	703,584	106,382
Total Police & Fire		**1,075,702**	**178,354**		**1,106,639**	**167,082**
Total		**$2,250,420**	**$331,969**		**$2,251,994**	**$261,040**
Employer normal cost rate						
General Service			**13.08%**			**8.20%**
Police & Fire			**16.58%**			**15.10%**
Aggregate (Default)			**14.75%**			**11.59%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($147,896)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.34%)
B. Actual employer payroll	1,803,687
C. Payment to transition liability/(surplus)	(6,133)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.34%)
B. Actual employer payroll	1,791,102
C. Payment to transition liability/(surplus)	(6,089)
4. Supplemental payment to transition liability	0
5. Interest	(10,854)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($146,528)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(146,528)	(147,896)
2. Combined valuation payroll	3,549,115	3,443,148
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.37%)**	**(0.37%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,549,115	3,443,148
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Aurora/2272
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Aurora/2272

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Aurora/2272

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Aurora -- #2272

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Aurora to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Aurora.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Aurora

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.43%	14.43%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.31%)	(9.31%)	(9.31%)	(9.31%)	(9.31%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.96%**	**9.96%**	**12.25%**	**2.89%**	**6.99%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.52%**	**10.52%**	**12.81%**	**3.37%**	**7.47%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.61%	5.91%	13.43%	4.62%	7.33%
July 1, 2013 to June 30, 2015	7.17%	7.17%	14.97%	6.15%	8.88%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Aurora

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$258,702	$452,140
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(265,119)	(268,073)
Allocated pooled OPSRP UAL	17,809	4,839
Side account	0	0
Net unfunded pension actuarial accrued liability	11,392	188,906
Combined valuation payroll	252,671	283,624
Net pension UAL as a percentage of payroll	5%	67%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.31%)	(8.13%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,301	$7,347
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$138,701	$21,915	5.78%	$124,626	$7,203
Tier 2 General Service	10.58%	49,199	5,205	10.42%	59,993	6,251
Total General Service		**187,900**	**27,120**		**184,619**	**13,454**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$187,900**	**$27,120**		**$184,619**	**$13,454**
Employer normal cost rate						
General Service			**14.43%**			**7.29%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.43%**			**7.29%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($268,073)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.69%)
B. Actual employer payroll	158,036
C. Payment to transition liability/(surplus)	(12,153)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.69%)
B. Actual employer payroll	135,758
C. Payment to transition liability/(surplus)	(10,439)
4. Supplemental payment to transition liability	0
5. Interest	(19,638)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($265,119)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(265,119)	(268,073)
2. Combined valuation payroll	252,671	283,624
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.31%)**	**(8.13%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	252,671	283,624
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

City of Aumsville/2234
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Aumsville/2234

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Aumsville/2234

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Aumsville -- #2234

December 2013

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Executive Summary

Milliman has prepared this report for City of Aumsville to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Aumsville.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Aumsville

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.89%	13.03%	16.84%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(5.02%)	(5.02%)	(5.02%)	(5.02%)	(5.02%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.95%**	**11.09%**	**14.90%**	**5.42%**	**9.52%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.51%**	**11.65%**	**15.46%**	**5.90%**	**10.00%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.52%	6.83%	14.31%	5.02%	7.73%
July 1, 2013 to June 30, 2015	9.03%	7.42%	14.26%	5.44%	8.17%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Aumsville

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$814,415	$1,232,032
Allocated pre-SLGRP pooled liability/(surplus)	(157,611)	(157,702)
Transition liability/(surplus)	(449,842)	(465,401)
Allocated pooled OPSRP UAL	56,064	13,187
Side account	0	0
Net unfunded pension actuarial accrued liability	263,026	622,116
Combined valuation payroll	795,429	772,845
Net pension UAL as a percentage of payroll	33%	81%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(5.02%)	(5.18%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$16,688	$20,021
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$224,591	$35,485	5.78%	$214,696	$12,409
Tier 2 General Service	10.58%	253,251	26,794	10.42%	244,051	25,430
Total General Service		**477,842**	**62,279**		**458,747**	**37,839**
Tier 1 Police & Fire	17.89%	72,628	12,993	15.06%	76,354	11,499
Tier 2 Police & Fire	15.70%	66,957	10,512	15.12%	64,625	9,771
Total Police & Fire		**139,585**	**23,505**		**140,979**	**21,270**
Total		**$617,427**	**$85,784**		**$599,726**	**$59,109**
Employer normal cost rate						
General Service			**13.03%**			**8.25%**
Police & Fire			**16.84%**			**15.09%**
Aggregate (Default)			**13.89%**			**9.86%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($465,401)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.59%)
B. Actual employer payroll	428,812
C. Payment to transition liability/(surplus)	(23,971)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.59%)
B. Actual employer payroll	445,629
C. Payment to transition liability/(surplus)	(24,910)
4. Supplemental payment to transition liability	0
5. Interest	(33,322)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($449,842)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(449,842)	(465,401)
2. Combined valuation payroll	795,429	772,845
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.02%)**	**(5.18%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	795,429	772,845
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Astoria/2105
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Astoria/2105

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Astoria/2105

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Astoria -- #2105

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Astoria to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Astoria.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Astoria

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.51%	13.13%	16.82%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	2.00%	2.00%	2.00%	2.00%	2.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.59%**	**18.21%**	**21.90%**	**12.44%**	**16.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.15%**	**18.77%**	**22.46%**	**12.92%**	**17.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.06%	14.15%	22.02%	12.69%	15.40%
July 1, 2013 to June 30, 2015	17.25%	14.65%	21.81%	12.99%	15.72%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Astoria

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,692,292	$7,762,671
Allocated pre-SLGRP pooled liability/(surplus)	(1,101,612)	(993,633)
Transition liability/(surplus)	1,251,858	1,279,798
Allocated pooled OPSRP UAL	391,855	83,085
Side account	0	0
Net unfunded pension actuarial accrued liability	6,234,393	8,131,921
Combined valuation payroll	5,559,590	4,869,468
Net pension UAL as a percentage of payroll	112%	167%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	2.00%	2.26%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$116,643	$126,146
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$923,485	$145,911	5.78%	$1,007,160	$58,214
Tier 2 General Service	10.58%	967,400	102,351	10.42%	866,684	90,308
Total General Service		**1,890,885**	**248,262**		**1,873,844**	**148,522**
Tier 1 Police & Fire	17.89%	580,720	103,891	15.06%	570,158	85,866
Tier 2 Police & Fire	15.70%	554,773	87,099	15.12%	500,433	75,665
Total Police & Fire		**1,135,493**	**190,990**		**1,070,591**	**161,531**
Total		**$3,026,378**	**$439,252**		**$2,944,435**	**$310,053**
Employer normal cost rate						
General Service			**13.13%**			**7.93%**
Police & Fire			**16.82%**			**15.09%**
Aggregate (Default)			**14.51%**			**10.53%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$1,279,798
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.08%
B. Actual employer payroll	2,830,822
C. Payment to transition liability/(surplus)	58,881
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.08%
B. Actual employer payroll	2,970,582
C. Payment to transition liability/(surplus)	61,789
4. Supplemental payment to transition liability	0
5. Interest	92,730
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$1,251,858**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	1,251,858	1,279,798
2. Combined valuation payroll	5,559,590	4,869,468
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.00%**	**2.26%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	5,559,590	4,869,468
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

City of Ashland/2104
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Ashland/2104

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Ashland/2104

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Ashland -- #2104

December 2013

Secondary Employers

2169 Ashland Community Hospital

2744 Ashland Parks Commission

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Executive Summary

Milliman has prepared this report for City of Ashland to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Ashland.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Ashland

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.45%	13.46%	16.75%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.50%	0.50%	0.50%	0.50%	0.50%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.03%**	**17.04%**	**20.33%**	**10.94%**	**15.04%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.59%**	**17.60%**	**20.89%**	**11.42%**	**15.52%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.53%	12.48%	20.37%	11.10%	13.81%
July 1, 2013 to June 30, 2015	14.90%	12.76%	19.96%	11.14%	13.87%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Ashland

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$15,878,961	$23,028,958
Allocated pre-SLGRP pooled liability/(surplus)	(3,073,008)	(2,947,741)
Transition liability/(surplus)	867,483	879,879
Allocated pooled OPSRP UAL	1,093,102	246,481
Side account	0	0
Net unfunded pension actuarial accrued liability	14,766,538	21,207,577
Combined valuation payroll	15,508,782	14,445,901
Net pension UAL as a percentage of payroll	95%	147%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.50%	0.52%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$325,381	$374,228
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$3,536,521	$558,770	5.78%	$3,573,667	$206,558
Tier 2 General Service	10.58%	2,876,401	304,323	10.42%	2,969,483	309,420
Total General Service		**6,412,922**	**863,093**		**6,543,150**	**515,978**
Tier 1 Police & Fire	17.89%	1,324,371	236,930	15.06%	1,275,178	192,042
Tier 2 Police & Fire	15.70%	1,429,423	224,419	15.12%	1,504,015	227,407
Total Police & Fire		**2,753,794**	**461,349**		**2,779,193**	**419,449**
Total		**$9,166,716**	**$1,324,442**		**$9,322,343**	**$935,427**
Employer normal cost rate						
General Service			**13.46%**			**7.89%**
Police & Fire			**16.75%**			**15.09%**
Aggregate (Default)			**14.45%**			**10.03%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$879,879
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.49%
B. Actual employer payroll	7,499,446
C. Payment to transition liability/(surplus)	36,747
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.49%
B. Actual employer payroll	8,144,351
C. Payment to transition liability/(surplus)	39,907
4. Supplemental payment to transition liability	0
5. Interest	64,258
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$867,483**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	867,483	879,879
2. Combined valuation payroll	15,508,782	14,445,901
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.50%**	**0.52%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	15,508,782	14,445,901
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Amity/2235
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Amity/2235

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Amity/2235

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Amity -- #2235

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Amity to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Amity.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Amity

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.64%	11.64%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(6.01%)	(6.01%)	(6.01%)	(6.01%)	(6.01%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.47%**	**10.47%**	**15.55%**	**6.19%**	**10.29%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.03%**	**11.03%**	**16.11%**	**6.67%**	**10.77%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.11%	7.92%	14.30%	5.00%	7.71%
July 1, 2013 to June 30, 2015	11.08%	11.08%	16.72%	7.90%	10.63%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Amity

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$441,820	$657,103
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(292,426)	(305,614)
Allocated pooled OPSRP UAL	30,415	7,033
Side account	0	0
Net unfunded pension actuarial accrued liability	179,809	358,522
Combined valuation payroll	431,520	412,196
Net pension UAL as a percentage of payroll	42%	87%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(6.01%)	(6.38%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,053	$10,678
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$45,747	$7,228	5.78%	$45,596	$2,635
Tier 2 General Service	10.58%	179,419	18,983	10.42%	172,236	17,947
Total General Service		**225,166**	**26,211**		**217,832**	**20,582**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$225,166**	**$26,211**		**$217,832**	**$20,582**
Employer normal cost rate						
General Service			**11.64%**			**9.45%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.64%**			**9.45%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($305,614)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.31%)
B. Actual employer payroll	227,356
C. Payment to transition liability/(surplus)	(16,620)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.31%)
B. Actual employer payroll	249,380
C. Payment to transition liability/(surplus)	(18,229)
4. Supplemental payment to transition liability	0
5. Interest	(21,661)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($292,426)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(292,426)	(305,614)
2. Combined valuation payroll	431,520	412,196
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.01%)**	**(6.38%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	431,520	412,196
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

City of Albany/2103
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Albany/2103

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Albany/2103

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Albany -- #2103

December 2013

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Executive Summary

Milliman has prepared this report for City of Albany to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Albany.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Albany

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.70%	12.62%	16.90%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.93%)	(2.93%)	(2.93%)	(2.93%)	(2.93%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.61%**	**14.53%**	**18.81%**	**9.27%**	**13.37%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.17%**	**15.09%**	**19.37%**	**9.75%**	**13.85%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.76%	11.35%	19.04%	9.70%	12.41%
July 1, 2013 to June 30, 2015	14.79%	11.66%	18.40%	9.58%	12.31%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Albany

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$25,819,399	$41,040,538
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(8,315,285)	(8,379,575)
Allocated pooled OPSRP UAL	1,777,398	439,261
Side account	0	0
Net unfunded pension actuarial accrued liability	19,281,512	33,100,224
Combined valuation payroll	25,217,483	25,744,437
Net pension UAL as a percentage of payroll	76%	129%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.93%)	(2.80%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$529,074	$666,923
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$3,313,109	$523,471	5.78%	$4,221,452	$244,000
Tier 2 General Service	10.58%	5,148,493	544,711	10.42%	5,230,559	545,024
Total General Service		**8,461,602**	**1,068,182**		**9,452,011**	**789,024**
Tier 1 Police & Fire	17.89%	4,395,864	786,420	15.06%	4,658,850	701,623
Tier 2 Police & Fire	15.70%	3,620,278	568,384	15.12%	3,556,718	537,776
Total Police & Fire		**8,016,142**	**1,354,804**		**8,215,568**	**1,239,399**
Total		**$16,477,744**	**$2,422,986**		**$17,667,579**	**$2,028,423**
Employer normal cost rate						
General Service			**12.62%**			**8.35%**
Police & Fire			**16.90%**			**15.09%**
Aggregate (Default)			**14.70%**			**11.48%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($8,379,575)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.61%)
B. Actual employer payroll	12,965,264
C. Payment to transition liability/(surplus)	(338,393)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.61%)
B. Actual employer payroll	13,097,467
C. Payment to transition liability/(surplus)	(341,844)
4. Supplemental payment to transition liability	0
5. Interest	(615,947)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($8,315,285)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(8,315,285)	(8,379,575)
2. Combined valuation payroll	25,217,483	25,744,437
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.93%)**	**(2.80%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	25,217,483	25,744,437
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

City of Adair Village/2258
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
City of Adair Village/2258

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
City of Adair Village/2258

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

City of Adair Village -- #2258

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for City of Adair Village to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to City of Adair Village.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for City of Adair Village

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.39%	0.39%	0.39%	0.39%	0.39%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.27%**	**19.27%**	**20.19%**	**10.83%**	**14.93%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.83%**	**19.83%**	**20.75%**	**11.31%**	**15.41%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.20%	12.13%	21.14%	11.49%	14.20%
July 1, 2013 to June 30, 2015	13.09%	13.09%	21.81%	12.99%	15.72%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

City of Adair Village

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$276,074	$387,046
Allocated pre-SLGRP pooled liability/(surplus)	(53,428)	(49,542)
Transition liability/(surplus)	11,942	13,177
Allocated pooled OPSRP UAL	19,005	4,143
Side account	0	0
Net unfunded pension actuarial accrued liability	253,593	354,824
Combined valuation payroll	269,638	242,791
Net pension UAL as a percentage of payroll	94%	146%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.39%	0.47%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,657	$6,290
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,599	$18,265	5.78%	$118,626	$6,857
Tier 2 General Service	10.58%	0	0	10.42%	17,164	1,788
Total General Service		**115,599**	**18,265**		**135,790**	**8,645**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$115,599**	**$18,265**		**$135,790**	**$8,645**
Employer normal cost rate						
General Service			**15.80%**			**6.37%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**6.37%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$13,177
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.88%
B. Actual employer payroll	119,072
C. Payment to transition liability/(surplus)	1,048
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.88%
B. Actual employer payroll	121,861
C. Payment to transition liability/(surplus)	1,072
4. Supplemental payment to transition liability	0
5. Interest	885
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$11,942**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	11,942	13,177
2. Combined valuation payroll	269,638	242,791
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.39%**	**0.47%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	269,638	242,791
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Chetco Library Board/2699
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Chetco Library Board/2699

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Chetco Library Board/2699

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Chetco Library Board -- #2699

December 2013

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Executive Summary

Milliman has prepared this report for Chetco Library Board to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Chetco Library Board.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Chetco Library Board

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.51%	14.51%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.38%)	(0.38%)	(0.38%)	(0.38%)	(0.38%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.21%**	**17.21%**	**19.42%**	**10.06%**	**14.16%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.77%**	**17.77%**	**19.98%**	**10.54%**	**14.64%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.83%	10.83%	19.47%	10.24%	12.95%
July 1, 2013 to June 30, 2015	10.87%	10.87%	19.05%	10.23%	12.96%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Chetco Library Board

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$240,289	$354,095
Allocated pre-SLGRP pooled liability/(surplus)	(46,502)	(45,325)
Transition liability/(surplus)	(10,040)	(10,129)
Allocated pooled OPSRP UAL	16,541	3,790
Side account	0	0
Net unfunded pension actuarial accrued liability	200,288	302,431
Combined valuation payroll	234,687	222,121
Net pension UAL as a percentage of payroll	85%	136%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.38%)	(0.39%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,924	$5,754
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$153,055	$24,183	5.78%	$150,221	$8,683
Tier 2 General Service	10.58%	50,361	5,328	10.42%	48,483	5,052
Total General Service		**203,416**	**29,511**		**198,704**	**13,735**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$203,416**	**$29,511**		**$198,704**	**$13,735**
Employer normal cost rate						
General Service			**14.51%**			**6.91%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.51%**			**6.91%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($10,129)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.37%)
B. Actual employer payroll	110,478
C. Payment to transition liability/(surplus)	(409)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.37%)
B. Actual employer payroll	114,490
C. Payment to transition liability/(surplus)	(424)
4. Supplemental payment to transition liability	0
5. Interest	(744)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($10,040)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(10,040)	(10,129)
2. Combined valuation payroll	234,687	222,121
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.38%)**	**(0.39%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	234,687	222,121
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Chemeketa Community College/2919
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Chemeketa Community College/2919

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Chemeketa Community College/2919

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Chemeketa Community College -- #2919

December 2013

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Executive Summary

Milliman has prepared this report for Chemeketa Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Chemeketa Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Chemeketa Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(10.00%)	(10.00%)	(10.00%)	(10.00%)	(10.00%)
Net pension contribution rate	**9.84%**	**9.84%**	**13.41%**	**4.05%**	**8.15%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.40%**	**10.40%**	**13.97%**	**4.53%**	**8.63%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.39%	6.39%	14.05%	4.82%	7.53%
July 1, 2013 to June 30, 2015	6.40%	6.40%	13.42%	4.60%	7.33%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Chemeketa Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$45,404,788	$67,000,403
Allocated pre-SLGRP pooled liability/(surplus)	9,245,776	9,105,959
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	3,125,648	717,112
Side account	50,018,600	47,127,718
Net unfunded pension actuarial accrued liability	7,757,612	29,695,756
Combined valuation payroll	44,346,287	42,028,875
Net pension UAL as a percentage of payroll	17%	71%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(10.00%)	(9.64%)
Allocated pooled RHIA UAL	$930,404	$1,088,779
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$47,127,718**	**$47,127,718**
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(3,766,432)	(3,766,432)
5. Side account earnings during 2012		6,659,314	6,659,314
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$50,018,600**	**$50,018,600**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$27,254,533	$25,673,477
Side Account 2	22,764,068	21,454,241
Side Account 3	0	0
Total	**$50,018,600**	**$47,127,718**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$50,018,600	$47,127,718
2. Combined valuation payroll	44,346,287	42,028,875
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(10.00%)	(9.64%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Charleston Rural Fire Protection District/2567
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Charleston Rural Fire Protection District/2567

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Charleston Rural Fire Protection District/2567

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Charleston Rural Fire Protection District -- #2567

December 2013

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Executive Summary

Milliman has prepared this report for Charleston Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Charleston Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Charleston Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.27%	13.34%	17.27%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.33%)	(5.33%)	(5.33%)	(5.33%)	(5.33%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.78%**	**12.85%**	**16.78%**	**6.87%**	**10.97%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.34%**	**13.41%**	**17.34%**	**7.35%**	**11.45%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.10%	9.14%	17.10%	7.69%	10.40%
July 1, 2013 to June 30, 2015	16.62%	9.46%	16.62%	7.81%	10.54%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Charleston Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$181,408	$282,544
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(106,498)	(106,449)
Allocated pooled OPSRP UAL	12,488	3,024
Side account	0	0
Net unfunded pension actuarial accrued liability	87,398	179,119
Combined valuation payroll	177,179	177,238
Net pension UAL as a percentage of payroll	49%	101%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.33%)	(5.17%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,717	$4,591
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	122,809	21,971	15.06%	121,761	18,337
Tier 2 Police & Fire	15.70%	48,127	7,556	15.12%	48,282	7,300
Total Police & Fire		**170,936**	**29,527**		**170,043**	**25,637**
Total		**$170,936**	**$29,527**		**$170,043**	**$25,637**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.27%**			**15.08%**
Aggregate (Default)			**17.27%**			**15.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($106,449)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.62%)
B. Actual employer payroll	85,221
C. Payment to transition liability/(surplus)	(3,937)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.62%)
B. Actual employer payroll	84,479
C. Payment to transition liability/(surplus)	(3,903)
4. Supplemental payment to transition liability	0
5. Interest	(7,889)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($106,498)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(106,498)	(106,449)
2. Combined valuation payroll	177,179	177,238
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.33%)**	**(5.17%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	177,179	177,238
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Central Oregon Irrigation District/2563
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Central Oregon Irrigation District/2563

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Central Oregon Irrigation District/2563

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Central Oregon Irrigation District -- #2563

December 2013

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Executive Summary

Milliman has prepared this report for Central Oregon Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Central Oregon Irrigation District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Central Oregon Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.46%	12.46%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	2.92%	2.92%	2.92%	2.92%	2.92%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.46%**	**18.46%**	**22.72%**	**13.36%**	**17.46%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.02%**	**19.02%**	**23.28%**	**13.84%**	**17.94%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.59%	15.59%	22.75%	13.52%	16.23%
July 1, 2013 to June 30, 2015	15.86%	15.86%	22.45%	13.63%	16.36%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Central Oregon Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,485,577	$2,205,957
Allocated pre-SLGRP pooled liability/(surplus)	(287,499)	(282,366)
Transition liability/(surplus)	478,228	484,565
Allocated pooled OPSRP UAL	102,267	23,611
Side account	0	0
Net unfunded pension actuarial accrued liability	1,778,573	2,431,767
Combined valuation payroll	1,450,944	1,383,781
Net pension UAL as a percentage of payroll	123%	176%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	2.92%	3.01%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$30,441	$35,848
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$291,402	$46,042	5.78%	$346,233	$20,012
Tier 2 General Service	10.58%	519,444	54,957	10.42%	490,545	51,115
Total General Service		**810,846**	**100,999**		**836,778**	**71,127**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$810,846**	**$100,999**		**$836,778**	**$71,127**
Employer normal cost rate						
General Service			**12.46%**			**8.50%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.46%**			**8.50%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$484,565
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.91%
B. Actual employer payroll	693,826
C. Payment to transition liability/(surplus)	20,190
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.91%
B. Actual employer payroll	741,251
C. Payment to transition liability/(surplus)	21,571
4. Supplemental payment to transition liability	0
5. Interest	35,424
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$478,228**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	478,228	484,565
2. Combined valuation payroll	1,450,944	1,383,781
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.92%**	**3.01%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,450,944	1,383,781
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

December 2013

Central Oregon Community College/2999
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Central Oregon Community College/2999

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Central Oregon Community College/2999

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Central Oregon Community College -- #2999

December 2013

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Executive Summary

Milliman has prepared this report for Central Oregon Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Central Oregon Community College.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Central Oregon Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(4.91%)	(4.91%)	(4.91%)	(4.91%)	(4.91%)
Net pension contribution rate	**14.93%**	**14.93%**	**18.50%**	**9.14%**	**13.24%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.49%**	**15.49%**	**19.06%**	**9.62%**	**13.72%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.62%	9.62%	17.28%	8.05%	10.76%
July 1, 2013 to June 30, 2015	10.93%	10.93%	17.95%	9.13%	11.86%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Central Oregon Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$21,218,846	$30,176,287
Allocated pre-SLGRP pooled liability/(surplus)	4,320,793	4,101,230
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	1,460,697	322,980
Side account	11,467,856	11,255,723
Net unfunded pension actuarial accrued liability	15,532,480	23,344,774
Combined valuation payroll	20,724,181	18,929,370
Net pension UAL as a percentage of payroll	75%	123%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(4.91%)	(5.11%)
Allocated pooled RHIA UAL	$434,802	$490,375
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$11,255,723**	**$11,255,723**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,340,317)	(1,340,317)
5. Side account earnings during 2012		1,553,450	1,553,450
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$11,467,856**	**$11,467,856**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$11,467,856	$11,255,723
Side Account 2	0	0
Side Account 3	0	0
Total	**$11,467,856**	**$11,255,723**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$11,467,856	$11,255,723
2. Combined valuation payroll	20,724,181	18,929,370
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(4.91%)	(5.11%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Central Oregon Coast Fire & Rescue District/2820
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Central Oregon Coast Fire & Rescue District/2820

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Central Oregon Coast Fire & Rescue District/2820

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Central Oregon Coast Fire & Rescue District -- #2820

December 2013

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Executive Summary

Milliman has prepared this report for Central Oregon Coast Fire & Rescue District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Central Oregon Coast Fire & Rescue District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Central Oregon Coast Fire & Rescue District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(8.77%)	(8.77%)	(8.77%)	(8.77%)	(8.77%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.77%**	**9.41%**	**11.77%**	**3.43%**	**7.53%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.33%**	**9.97%**	**12.33%**	**3.91%**	**8.01%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.50%	2.14%	9.50%	0.69%	3.40%
July 1, 2013 to June 30, 2015	13.15%	5.95%	13.15%	4.30%	7.03%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Central Oregon Coast Fire & Rescue District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$313,561	$533,440
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(302,599)	(314,387)
Allocated pooled OPSRP UAL	21,585	5,709
Side account	0	0
Net unfunded pension actuarial accrued liability	32,547	224,762
Combined valuation payroll	306,251	334,623
Net pension UAL as a percentage of payroll	11%	67%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(8.77%)	(8.08%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,425	$8,669
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	77,512	12,169	15.12%	106,691	16,132
Total Police & Fire		**77,512**	**12,169**		**106,691**	**16,132**
Total		**$77,512**	**$12,169**		**$106,691**	**$16,132**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($314,387)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(11.62%)
B. Actual employer payroll	132,526
C. Payment to transition liability/(surplus)	(15,400)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(11.62%)
B. Actual employer payroll	161,820
C. Payment to transition liability/(surplus)	(18,803)
4. Supplemental payment to transition liability	0
5. Interest	(22,415)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($302,599)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(302,599)	(314,387)
2. Combined valuation payroll	306,251	334,623
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.77%)**	**(8.08%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	306,251	334,623
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Cannon Beach Rural Fire Protection District/2840
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Cannon Beach Rural Fire Protection District/2840

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Cannon Beach Rural Fire Protection District/2840

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Cannon Beach Rural Fire Protection District -- #2840

December 2013

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Executive Summary

Milliman has prepared this report for Cannon Beach Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Cannon Beach Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Cannon Beach Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.06%)	(0.06%)	(0.06%)	(0.06%)	(0.06%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.72%**	**16.36%**	**18.72%**	**10.38%**	**14.48%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.28%**	**16.92%**	**19.28%**	**10.86%**	**14.96%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	19.37%	12.01%	19.37%	10.56%	13.27%
July 1, 2013 to June 30, 2015	19.40%	12.20%	19.40%	10.55%	13.28%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Cannon Beach Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$106,411	$129,341
Allocated pre-SLGRP pooled liability/(surplus)	(20,593)	(16,556)
Transition liability/(surplus)	(673)	(680)
Allocated pooled OPSRP UAL	7,325	1,384
Side account	0	0
Net unfunded pension actuarial accrued liability	92,470	113,489
Combined valuation payroll	103,930	81,135
Net pension UAL as a percentage of payroll	89%	140%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.06%)	(0.07%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,180	$2,102
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	67,092	10,533	15.12%	49,337	7,460
Total Police & Fire		**67,092**	**10,533**		**49,337**	**7,460**
Total		**$67,092**	**$10,533**		**$49,337**	**$7,460**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($680)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.05%)
B. Actual employer payroll	62,820
C. Payment to transition liability/(surplus)	(31)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.05%)
B. Actual employer payroll	50,461
C. Payment to transition liability/(surplus)	(26)
4. Supplemental payment to transition liability	0
5. Interest	(50)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($673)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(673)	(680)
2. Combined valuation payroll	103,930	81,135
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.06%)**	**(0.07%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	103,930	81,135
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Canby Utility Board/2731
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Canby Utility Board/2731

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Canby Utility Board/2731

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Canby Utility Board -- #2731

December 2013

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Executive Summary

Milliman has prepared this report for Canby Utility Board to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Canby Utility Board.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Canby Utility Board

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.32%	13.32%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.16%	0.16%	0.16%	0.16%	0.16%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.56%**	**16.56%**	**19.96%**	**10.60%**	**14.70%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.12%**	**17.12%**	**20.52%**	**11.08%**	**15.18%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.67%	11.67%	19.98%	10.75%	13.46%
July 1, 2013 to June 30, 2015	12.23%	12.23%	19.61%	10.79%	13.52%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Canby Utility Board

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,630,086	$2,332,392
Allocated pre-SLGRP pooled liability/(surplus)	(315,466)	(298,550)
Transition liability/(surplus)	28,677	28,743
Allocated pooled OPSRP UAL	112,215	24,964
Side account	0	0
Net unfunded pension actuarial accrued liability	1,455,512	2,087,549
Combined valuation payroll	1,592,085	1,463,093
Net pension UAL as a percentage of payroll	91%	143%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.16%	0.17%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$33,403	$37,902
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$336,991	$53,245	5.78%	$410,931	$23,752
Tier 2 General Service	10.58%	304,629	32,230	10.42%	293,751	30,609
Total General Service		**641,620**	**85,475**		**704,682**	**54,361**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$641,620**	**$85,475**		**$704,682**	**$54,361**
Employer normal cost rate						
General Service			**13.32%**			**7.71%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.32%**			**7.71%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$28,743
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.14%
B. Actual employer payroll	759,127
C. Payment to transition liability/(surplus)	1,063
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.14%
B. Actual employer payroll	805,199
C. Payment to transition liability/(surplus)	1,127
4. Supplemental payment to transition liability	0
5. Interest	2,124
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$28,677**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	28,677	28,743
2. Combined valuation payroll	1,592,085	1,463,093
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.16%**	**0.17%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,592,085	1,463,093
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Canby Fire District/2595
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Canby Fire District/2595

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Canby Fire District/2595

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Canby Fire District -- #2595

December 2013

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Executive Summary

Milliman has prepared this report for Canby Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Canby Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Canby Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.42%	10.58%	16.67%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.45%)	(2.45%)	(2.45%)	(2.45%)	(2.45%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.81%**	**12.97%**	**19.06%**	**9.75%**	**13.85%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.37%**	**13.53%**	**19.62%**	**10.23%**	**14.33%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	19.26%	11.44%	19.26%	9.99%	12.70%
July 1, 2013 to June 30, 2015	19.48%	14.97%	19.64%	10.82%	13.55%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Canby Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,866,128	$3,219,802
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(504,234)	(510,656)
Allocated pooled OPSRP UAL	128,464	34,462
Side account	0	0
Net unfunded pension actuarial accrued liability	1,490,358	2,743,608
Combined valuation payroll	1,822,624	2,019,759
Net pension UAL as a percentage of payroll	82%	136%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.45%)	(2.17%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$38,239	$52,323
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	62,709	6,635	10.42%	62,184	6,480
Total General Service		**62,709**	**6,635**		**62,184**	**6,480**
Tier 1 Police & Fire	17.89%	663,361	118,675	15.06%	899,986	135,538
Tier 2 Police & Fire	15.70%	836,680	131,359	15.12%	820,259	124,023
Total Police & Fire		**1,500,041**	**250,034**		**1,720,245**	**259,561**
Total		**$1,562,750**	**$256,669**		**$1,782,429**	**$266,041**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.67%**			**15.09%**
Aggregate (Default)			**16.42%**			**14.93%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($510,656)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.32%)
B. Actual employer payroll	902,437
C. Payment to transition liability/(surplus)	(20,937)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.32%)
B. Actual employer payroll	984,291
C. Payment to transition liability/(surplus)	(22,836)
4. Supplemental payment to transition liability	0
5. Interest	(37,351)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($504,234)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(504,234)	(510,656)
2. Combined valuation payroll	1,822,624	2,019,759
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.45%)**	**(2.17%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,822,624	2,019,759
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Boring Fire Department/2558
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Boring Fire Department/2558

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Boring Fire Department/2558

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Boring Fire Department -- #2558

December 2013

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Executive Summary

Milliman has prepared this report for Boring Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Boring Fire Department.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Boring Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.72%	10.58%	17.05%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(3.64%)	(3.64%)	(3.64%)	(3.64%)	(3.64%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.16%**	**10.02%**	**16.49%**	**6.80%**	**10.90%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.72%**	**10.58%**	**17.05%**	**7.28%**	**11.38%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.20%	8.26%	15.82%	6.55%	9.26%
July 1, 2013 to June 30, 2015	15.63%	9.19%	16.26%	7.44%	10.17%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Boring Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,597,791	$2,479,818
Allocated pre-SLGRP pooled liability/(surplus)	(309,216)	(317,420)
Transition liability/(surplus)	(640,293)	(658,744)
Allocated pooled OPSRP UAL	109,991	26,542
Side account	0	0
Net unfunded pension actuarial accrued liability	758,273	1,530,196
Combined valuation payroll	1,560,542	1,555,572
Net pension UAL as a percentage of payroll	49%	98%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(3.64%)	(3.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$32,741	$40,298
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$46,270	$2,674
Tier 2 General Service	10.58%	41,718	4,414	10.42%	43,302	4,512
Total General Service		**41,718**	**4,414**		**89,572**	**7,186**
Tier 1 Police & Fire	17.89%	477,106	85,354	15.06%	462,731	69,687
Tier 2 Police & Fire	15.70%	295,048	46,323	15.12%	457,098	69,113
Total Police & Fire		**772,154**	**131,677**		**919,829**	**138,800**
Total		**$813,872**	**$136,091**		**$1,009,401**	**$145,986**
Employer normal cost rate						
General Service			**10.58%**			**8.02%**
Police & Fire			**17.05%**			**15.09%**
Aggregate (Default)			**16.72%**			**14.46%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($658,744)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.06%)
B. Actual employer payroll	796,483
C. Payment to transition liability/(surplus)	(32,337)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.06%)
B. Actual employer payroll	826,159
C. Payment to transition liability/(surplus)	(33,543)
4. Supplemental payment to transition liability	0
5. Interest	(47,429)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($640,293)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(640,293)	(658,744)
2. Combined valuation payroll	1,560,542	1,555,572
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.64%)**	**(3.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,560,542	1,555,572
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Blue Mountain Community College/2901
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Blue Mountain Community College/2901

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Blue Mountain Community College/2901

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Blue Mountain Community College -- #2901

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Blue Mountain Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Blue Mountain Community College.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Blue Mountain Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(7.99%)	(7.99%)	(7.99%)	(7.99%)	(7.99%)
Net pension contribution rate	**11.85%**	**11.85%**	**15.42%**	**6.06%**	**10.16%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.41%**	**12.41%**	**15.98%**	**6.54%**	**10.64%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.87%	7.87%	15.53%	6.30%	9.01%
July 1, 2013 to June 30, 2015	8.89%	8.89%	15.91%	7.09%	9.82%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Blue Mountain Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$10,224,549	$16,397,526
Allocated pre-SLGRP pooled liability/(surplus)	2,082,025	2,228,572
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	703,854	175,504
Side account	8,988,485	8,554,341
Net unfunded pension actuarial accrued liability	4,021,943	10,247,261
Combined valuation payroll	9,986,189	10,286,051
Net pension UAL as a percentage of payroll	40%	100%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(7.99%)	(7.15%)
Allocated pooled RHIA UAL	$209,514	$266,465
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$8,554,341**	**$8,554,341**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(766,039)	(766,039)
5. Side account earnings during 2012		1,201,183	1,201,183
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$8,988,485**	**$8,988,485**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$8,988,485	$8,554,341
Side Account 2	0	0
Side Account 3	0	0
Total	**$8,988,485**	**$8,554,341**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$8,988,485	$8,554,341
2. Combined valuation payroll	9,986,189	10,286,051
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(7.99%)	(7.15%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Black Butte Ranch Police/2749
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Black Butte Ranch Police/2749

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Black Butte Ranch Police/2749

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Black Butte Ranch Police -- #2749

December 2013

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Executive Summary

Milliman has prepared this report for Black Butte Ranch Police to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Black Butte Ranch Police.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Black Butte Ranch Police

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.10%	13.34%	16.10%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(6.94%)	(6.94%)	(6.94%)	(6.94%)	(6.94%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.24%**	**9.48%**	**12.24%**	**3.50%**	**7.60%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.80%**	**10.04%**	**12.80%**	**3.98%**	**8.08%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.39%	5.72%	11.14%	1.96%	4.67%
July 1, 2013 to June 30, 2015	12.84%	8.76%	13.45%	4.61%	7.34%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Black Butte Ranch Police

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$398,355	$706,770
Allocated pre-SLGRP pooled liability/(surplus)	(77,092)	(90,468)
Transition liability/(surplus)	(304,487)	(320,301)
Allocated pooled OPSRP UAL	27,423	7,565
Side account	0	0
Net unfunded pension actuarial accrued liability	44,199	303,566
Combined valuation payroll	389,068	443,352
Net pension UAL as a percentage of payroll	11%	68%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(6.94%)	(6.21%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,163	$11,485
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	47,200	4,918
Total General Service		**0**	**0**		**47,200**	**4,918**
Tier 1 Police & Fire	17.89%	56,497	10,107	15.06%	58,477	8,807
Tier 2 Police & Fire	15.70%	249,528	39,176	15.12%	255,988	38,705
Total Police & Fire		**306,025**	**49,283**		**314,465**	**47,512**
Total		**$306,025**	**$49,283**		**$361,665**	**$52,430**
Employer normal cost rate						
General Service			**13.34%**			**10.42%**
Police & Fire			**16.10%**			**15.11%**
Aggregate (Default)			**16.10%**			**14.50%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($320,301)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.65%)
B. Actual employer payroll	215,845
C. Payment to transition liability/(surplus)	(18,671)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.65%)
B. Actual employer payroll	227,721
C. Payment to transition liability/(surplus)	(19,698)
4. Supplemental payment to transition liability	0
5. Interest	(22,555)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($304,487)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(304,487)	(320,301)
2. Combined valuation payroll	389,068	443,352
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.94%)**	**(6.21%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	389,068	443,352
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Benton County/2040
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Benton County/2040

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Benton County/2040

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Benton County -- #2040

December 2013

Secondary Employers

2639 North Albany Service District

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Benton County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Benton County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Benton County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.46%	12.71%	16.50%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.36%)	(4.36%)	(4.36%)	(4.36%)	(4.36%)
Side account rate relief [2]	(2.54%)	(2.54%)	(2.54%)	(2.54%)	(2.54%)
Net pension contribution rate	**11.40%**	**10.65%**	**14.44%**	**5.30%**	**9.40%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.96%**	**11.21%**	**15.00%**	**5.78%**	**9.88%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.75%	7.30%	14.58%	5.40%	8.11%
July 1, 2013 to June 30, 2015	9.27%	7.96%	14.61%	5.78%	8.51%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Benton County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$22,867,876	$35,934,308
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(10,969,174)	(11,196,516)
Allocated pooled OPSRP UAL	1,574,216	384,609
Side account	6,397,412	6,101,575
Net unfunded pension actuarial accrued liability	7,075,506	19,020,826
Combined valuation payroll	22,334,768	22,541,335
Net pension UAL as a percentage of payroll	32%	84%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.36%)	(4.27%)
Side account rate relief	(2.54%)	(2.33%)
Allocated pooled RHIA UAL	$468,593	$583,945
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$4,068,270	$642,787	5.78%	$4,502,500	$260,245
Tier 2 General Service	10.58%	5,896,711	623,872	10.42%	6,106,980	636,347
Total General Service		**9,964,981**	**1,266,659**		**10,609,480**	**896,592**
Tier 1 Police & Fire	17.89%	889,505	159,132	15.06%	1,036,102	156,037
Tier 2 Police & Fire	15.70%	1,550,530	243,433	15.12%	1,574,753	238,103
Total Police & Fire		**2,440,035**	**402,565**		**2,610,855**	**394,140**
Total		**$12,405,016**	**$1,669,224**		**$13,220,335**	**$1,290,732**
Employer normal cost rate						
General Service			**12.71%**			**8.45%**
Police & Fire			**16.50%**			**15.10%**
Aggregate (Default)			**13.46%**			**9.76%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($11,196,516)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.43%)
B. Actual employer payroll	11,678,333
C. Payment to transition liability/(surplus)	(517,350)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.43%)
B. Actual employer payroll	11,795,121
C. Payment to transition liability/(surplus)	(522,523)
4. Supplemental payment to transition liability	0
5. Interest	(812,531)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($10,969,174)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(10,969,174)	(11,196,516)
2. Combined valuation payroll	22,334,768	22,541,335
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.36%)**	**(4.27%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$6,101,575**	**$6,101,575**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(560,097)	(560,097)
5. Side account earnings during 2012		856,934	856,934
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$6,397,412**	**$6,397,412**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$6,397,412	$6,101,575
Side Account 2	0	0
Side Account 3	0	0
Total	**$6,397,412**	**$6,101,575**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$6,397,412	$6,101,575
2. Combined valuation payroll	22,334,768	22,541,335
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(2.54%)	(2.33%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Baker Valley Irrigation District/2601
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Baker Valley Irrigation District/2601

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Baker Valley Irrigation District/2601

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Baker Valley Irrigation District -- #2601

December 2013

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Executive Summary

Milliman has prepared this report for Baker Valley Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Baker Valley Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Baker Valley Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(18.17%)	(18.17%)	(18.17%)	(18.17%)	(18.17%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**2.47%**	**2.47%**	**3.39%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**3.03%**	**3.03%**	**3.95%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	5.33%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	3.43%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Baker Valley Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$98,915	$150,043
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(197,913)	(196,187)
Allocated pooled OPSRP UAL	6,809	1,606
Side account	0	0
Net unfunded pension actuarial accrued liability	(92,189)	(44,538)
Combined valuation payroll	96,609	94,121
Net pension UAL as a percentage of payroll	(95%)	(47%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(18.17%)	(17.93%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,027	$2,438
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$71,236	$11,255	5.78%	$70,805	$4,093
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**71,236**	**11,255**		**70,805**	**4,093**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$71,236**	**$11,255**		**$70,805**	**$4,093**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($196,187)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(11.98%)
B. Actual employer payroll	54,202
C. Payment to transition liability/(surplus)	(6,537)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(11.98%)
B. Actual employer payroll	52,968
C. Payment to transition liability/(surplus)	(6,397)
4. Supplemental payment to transition liability	0
5. Interest	(14,660)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($197,913)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(197,913)	(196,187)
2. Combined valuation payroll	96,609	94,121
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(18.17%)**	**(17.93%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	96,609	94,121
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Baker County/2021
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Baker County/2021

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Baker County/2021

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Baker County -- #2021

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Baker County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Baker County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Baker County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.49%	12.46%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.09%)	(4.09%)	(4.09%)	(4.09%)	(4.09%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.24%**	**13.21%**	**16.45%**	**8.11%**	**12.21%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.80%**	**13.77%**	**17.01%**	**8.59%**	**12.69%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.92%	10.62%	17.32%	8.46%	11.17%
July 1, 2013 to June 30, 2015	12.80%	11.00%	17.29%	8.44%	11.17%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Baker County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$5,241,216	$8,130,905
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(2,360,392)	(2,394,012)
Allocated pooled OPSRP UAL	360,803	87,026
Side account	0	0
Net unfunded pension actuarial accrued liability	3,241,627	5,823,919
Combined valuation payroll	5,119,030	5,100,459
Net pension UAL as a percentage of payroll	63%	114%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.09%)	(4.04%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$107,399	$132,130
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$631,581	$99,790	5.78%	$668,497	$38,639
Tier 2 General Service	10.58%	1,117,806	118,264	10.42%	1,285,886	133,989
Total General Service		**1,749,387**	**218,054**		**1,954,383**	**172,628**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	807,150	126,723	15.12%	781,689	118,191
Total Police & Fire		**807,150**	**126,723**		**781,689**	**118,191**
Total		**$2,556,537**	**$344,777**		**$2,736,072**	**$290,819**
Employer normal cost rate						
General Service			**12.46%**			**8.83%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**13.49%**			**10.63%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($2,394,012)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.85%)
B. Actual employer payroll	2,705,855
C. Payment to transition liability/(surplus)	(104,175)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.85%)
B. Actual employer payroll	2,708,798
C. Payment to transition liability/(surplus)	(104,289)
4. Supplemental payment to transition liability	0
5. Interest	(174,844)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($2,360,392)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(2,360,392)	(2,394,012)
2. Combined valuation payroll	5,119,030	5,100,459
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.09%)**	**(4.04%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	5,119,030	5,100,459
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Baker County Library District/2728
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Baker County Library District/2728

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Baker County Library District/2728

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Baker County Library District -- #2728

December 2013

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Executive Summary

Milliman has prepared this report for Baker County Library District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Baker County Library District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Baker County Library District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.30%	12.30%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.22%)	(2.22%)	(2.22%)	(2.22%)	(2.22%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.92%**	**14.92%**	**19.34%**	**9.98%**	**14.08%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.48%**	**15.48%**	**19.90%**	**10.46%**	**14.56%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.74%	11.74%	18.95%	9.72%	12.43%
July 1, 2013 to June 30, 2015	12.61%	12.61%	18.77%	9.95%	12.68%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Baker County Library District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$433,689	$619,631
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(106,078)	(109,961)
Allocated pooled OPSRP UAL	29,855	6,632
Side account	0	0
Net unfunded pension actuarial accrued liability	357,466	516,302
Combined valuation payroll	423,579	388,690
Net pension UAL as a percentage of payroll	84%	133%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.22%)	(2.43%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,887	$10,069
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$67,234	$10,623	5.78%	$62,723	$3,625
Tier 2 General Service	10.58%	137,191	14,515	10.42%	132,142	13,769
Total General Service		**204,425**	**25,138**		**194,865**	**17,394**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$204,425**	**$25,138**		**$194,865**	**$17,394**
Employer normal cost rate						
General Service			**12.30%**			**8.93%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.30%**			**8.93%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($109,961)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.59%)
B. Actual employer payroll	220,981
C. Payment to transition liability/(surplus)	(5,723)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.59%)
B. Actual employer payroll	232,367
C. Payment to transition liability/(surplus)	(6,018)
4. Supplemental payment to transition liability	0
5. Interest	(7,858)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($106,078)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(106,078)	(109,961)
2. Combined valuation payroll	423,579	388,690
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.22%)**	**(2.43%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	423,579	388,690
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Aurora Rural Fire Protection District/2804
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Aurora Rural Fire Protection District/2804

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Aurora Rural Fire Protection District/2804

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

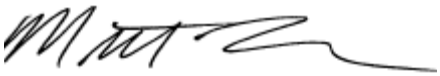
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

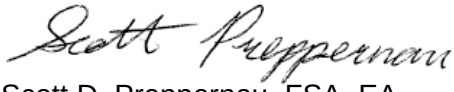
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Aurora Rural Fire Protection District -- #2804

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Aurora Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Aurora Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Aurora Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(10.31%)	(10.31%)	(10.31%)	(10.31%)	(10.31%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.23%**	**7.87%**	**10.23%**	**1.89%**	**5.99%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.79%**	**8.43%**	**10.79%**	**2.37%**	**6.47%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.97%	3.61%	10.97%	2.16%	4.87%
July 1, 2013 to June 30, 2015	10.93%	3.73%	10.93%	2.08%	4.81%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Aurora Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$282,177	$430,109
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(320,363)	(323,135)
Allocated pooled OPSRP UAL	19,425	4,603
Side account	0	0
Net unfunded pension actuarial accrued liability	(18,761)	111,577
Combined valuation payroll	275,599	269,804
Net pension UAL as a percentage of payroll	(7%)	41%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(10.31%)	(10.30%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,782	$6,989
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	76,365	11,989	15.12%	75,073	11,351
Total Police & Fire		**76,365**	**11,989**		**75,073**	**11,351**
Total		**$76,365**	**$11,989**		**$75,073**	**$11,351**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($323,135)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(10.15%)
B. Actual employer payroll	128,179
C. Payment to transition liability/(surplus)	(13,010)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(10.15%)
B. Actual employer payroll	132,929
C. Payment to transition liability/(surplus)	(13,493)
4. Supplemental payment to transition liability	0
5. Interest	(23,731)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($320,363)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(320,363)	(323,135)
2. Combined valuation payroll	275,599	269,804
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(10.31%)**	**(10.30%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	275,599	269,804
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Aumsville Rural Fire Protection District/2602
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Aumsville Rural Fire Protection District/2602

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Aumsville Rural Fire Protection District/2602

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Aumsville Rural Fire Protection District -- #2602

December 2013

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Executive Summary

Milliman has prepared this report for Aumsville Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Aumsville Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Aumsville Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.00%	10.58%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(7.02%)	(7.02%)	(7.02%)	(7.02%)	(7.02%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.82%**	**8.40%**	**15.71%**	**5.18%**	**9.28%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.38%**	**8.96%**	**16.27%**	**5.66%**	**9.76%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.82%	10.93%	16.82%	7.17%	9.88%
July 1, 2013 to June 30, 2015	16.23%	12.56%	17.20%	8.41%	11.14%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Aumsville Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$168,411	$372,246
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(130,192)	(130,316)
Allocated pooled OPSRP UAL	11,593	3,984
Side account	0	0
Net unfunded pension actuarial accrued liability	49,812	245,914
Combined valuation payroll	164,485	233,507
Net pension UAL as a percentage of payroll	30%	105%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(7.02%)	(4.80%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,451	$6,049
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	38,369	4,059	10.42%	35,200	3,668
Total General Service		**38,369**	**4,059**		**35,200**	**3,668**
Tier 1 Police & Fire	17.89%	58,673	10,497	15.06%	133,387	20,088
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**58,673**	**10,497**		**133,387**	**20,088**
Total		**$97,042**	**$14,556**		**$168,587**	**$23,756**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**15.00%**			**14.09%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($130,316)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.14%)
B. Actual employer payroll	110,525
C. Payment to transition liability/(surplus)	(5,681)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.14%)
B. Actual employer payroll	79,510
C. Payment to transition liability/(surplus)	(4,087)
4. Supplemental payment to transition liability	0
5. Interest	(9,644)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($130,192)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(130,192)	(130,316)
2. Combined valuation payroll	164,485	233,507
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(7.02%)**	**(4.80%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	164,485	233,507
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Arch Cape Water-Sanitary District/2631
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Arch Cape Water-Sanitary District/2631

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Arch Cape Water-Sanitary District/2631

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Arch Cape Water-Sanitary District -- #2631

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Arch Cape Water-Sanitary District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Arch Cape Water-Sanitary District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Arch Cape Water-Sanitary District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.65%	13.65%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.32%)	(5.32%)	(5.32%)	(5.32%)	(5.32%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.17%**	**13.17%**	**16.24%**	**6.88%**	**10.98%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.73%**	**13.73%**	**16.80%**	**7.36%**	**11.46%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.80%	7.80%	15.67%	6.44%	9.15%
July 1, 2013 to June 30, 2015	8.55%	8.55%	15.92%	7.10%	9.83%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Arch Cape Water-Sanitary District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$123,227	$190,955
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(72,117)	(73,538)
Allocated pooled OPSRP UAL	8,483	2,044
Side account	0	0
Net unfunded pension actuarial accrued liability	59,593	119,461
Combined valuation payroll	120,354	119,785
Net pension UAL as a percentage of payroll	50%	100%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.32%)	(5.28%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,525	$3,103
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$70,772	$11,182	5.78%	$69,721	$4,030
Tier 2 General Service	10.58%	49,582	5,246	10.42%	50,064	5,217
Total General Service		**120,354**	**16,428**		**119,785**	**9,247**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$120,354**	**$16,428**		**$119,785**	**$9,247**
Employer normal cost rate						
General Service			**13.65%**			**7.72%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.65%**			**7.72%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($73,538)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.87%)
B. Actual employer payroll	56,249
C. Payment to transition liability/(surplus)	(3,302)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.87%)
B. Actual employer payroll	58,963
C. Payment to transition liability/(surplus)	(3,461)
4. Supplemental payment to transition liability	0
5. Interest	(5,342)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($72,117)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(72,117)	(73,538)
2. Combined valuation payroll	120,354	119,785
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.32%)**	**(5.28%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	120,354	119,785
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Yachats Rural Fire Protection District/2843
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Yachats Rural Fire Protection District/2843

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Yachats Rural Fire Protection District/2843

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Yachats Rural Fire Protection District -- #2843

December 2013

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Executive Summary

Milliman has prepared this report for Yachats Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Yachats Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Yachats Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.76%	13.34%	15.76%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.27%)	(4.27%)	(4.27%)	(4.27%)	(4.27%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.33%**	**13.91%**	**16.33%**	**7.93%**	**12.03%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.89%**	**14.47%**	**16.89%**	**8.41%**	**12.51%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.81%	9.45%	16.81%	8.00%	10.71%
July 1, 2013 to June 30, 2015	16.86%	9.76%	16.86%	8.11%	10.84%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Yachats Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$123,942	$186,133
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(58,271)	(58,802)
Allocated pooled OPSRP UAL	8,532	1,992
Side account	0	0
Net unfunded pension actuarial accrued liability	74,203	129,323
Combined valuation payroll	121,053	116,760
Net pension UAL as a percentage of payroll	61%	111%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.27%)	(4.33%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,540	$3,025
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	368	58	15.12%	233	35
Total Police & Fire		**368**	**58**		**233**	**35**
Total		**$368**	**$58**		**$233**	**$35**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.76%**			**15.02%**
Aggregate (Default)			**15.76%**			**15.02%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($58,802)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.31%)
B. Actual employer payroll	54,837
C. Payment to transition liability/(surplus)	(2,363)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.31%)
B. Actual employer payroll	57,618
C. Payment to transition liability/(surplus)	(2,484)
4. Supplemental payment to transition liability	0
5. Interest	(4,316)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($58,271)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(58,271)	(58,802)
2. Combined valuation payroll	121,053	116,760
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.27%)**	**(4.33%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	121,053	116,760
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Woodburn Fire District/2676
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Woodburn Fire District/2676

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Woodburn Fire District/2676

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Woodburn Fire District -- #2676

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Woodburn Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Woodburn Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Woodburn Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.30%	13.34%	16.30%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	5.85%	5.85%	5.85%	5.85%	5.85%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**26.99%**	**24.03%**	**26.99%**	**18.05%**	**22.15%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**27.55%**	**24.59%**	**27.55%**	**18.53%**	**22.63%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	26.90%	19.30%	26.90%	17.85%	20.56%
July 1, 2013 to June 30, 2015	26.86%	19.68%	26.86%	18.03%	20.76%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Woodburn Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,053,900	$1,739,540
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	679,075	689,229
Allocated pooled OPSRP UAL	72,550	18,618
Side account	0	0
Net unfunded pension actuarial accrued liability	1,805,525	2,447,387
Combined valuation payroll	1,029,331	1,091,201
Net pension UAL as a percentage of payroll	175%	224%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	5.85%	5.43%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$21,596	$28,268
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	204,966	36,668	15.06%	204,121	30,741
Tier 2 Police & Fire	15.70%	545,277	85,608	15.12%	539,752	81,611
Total Police & Fire		**750,243**	**122,276**		**743,873**	**112,352**
Total		**$750,243**	**$122,276**		**$743,873**	**$112,352**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.30%**			**15.10%**
Aggregate (Default)			**16.30%**			**15.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$689,229
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	5.54%
B. Actual employer payroll	537,559
C. Payment to transition liability/(surplus)	29,781
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	5.54%
B. Actual employer payroll	553,702
C. Payment to transition liability/(surplus)	30,675
4. Supplemental payment to transition liability	0
5. Interest	50,302
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$679,075**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	679,075	689,229
2. Combined valuation payroll	1,029,331	1,091,201
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**5.85%**	**5.43%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,029,331	1,091,201
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Winston-Dillard Water District/2600
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Winston-Dillard Water District/2600

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Winston-Dillard Water District/2600

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Winston-Dillard Water District -- #2600

December 2013

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Executive Summary

Milliman has prepared this report for Winston-Dillard Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Winston-Dillard Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Winston-Dillard Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.30%	12.30%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.95%)	(2.95%)	(2.95%)	(2.95%)	(2.95%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.19%**	**14.19%**	**18.61%**	**9.25%**	**13.35%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.75%**	**14.75%**	**19.17%**	**9.73%**	**13.83%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.15%	12.15%	19.39%	10.16%	12.87%
July 1, 2013 to June 30, 2015	12.15%	12.15%	18.34%	9.52%	12.25%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Winston-Dillard Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$377,528	$580,960
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(122,621)	(121,282)
Allocated pooled OPSRP UAL	25,989	6,218
Side account	0	0
Net unfunded pension actuarial accrued liability	280,896	465,896
Combined valuation payroll	368,727	364,432
Net pension UAL as a percentage of payroll	76%	128%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.95%)	(2.86%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$7,736	$9,441
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$80,620	$12,738	5.78%	$74,287	$4,294
Tier 2 General Service	10.58%	164,403	17,394	10.42%	151,959	15,834
Total General Service		**245,023**	**30,132**		**226,246**	**20,128**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$245,023**	**$30,132**		**$226,246**	**$20,128**
Employer normal cost rate						
General Service			**12.30%**			**8.90%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.30%**			**8.90%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($121,282)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.15%)
B. Actual employer payroll	180,814
C. Payment to transition liability/(surplus)	(3,888)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.15%)
B. Actual employer payroll	179,405
C. Payment to transition liability/(surplus)	(3,856)
4. Supplemental payment to transition liability	0
5. Interest	(9,083)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($122,621)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(122,621)	(121,282)
2. Combined valuation payroll	368,727	364,432
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.95%)**	**(2.86%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	368,727	364,432
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Winston-Dillard Fire District/2552
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Winston-Dillard Fire District/2552

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Winston-Dillard Fire District/2552

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Winston-Dillard Fire District -- #2552

December 2013

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Executive Summary

Milliman has prepared this report for Winston-Dillard Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Winston-Dillard Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Winston-Dillard Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.91%	13.34%	16.91%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	9.09%	9.09%	9.09%	9.09%	9.09%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**29.08%**	**25.51%**	**29.08%**	**19.53%**	**23.63%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**29.64%**	**26.07%**	**29.64%**	**20.01%**	**24.11%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	26.08%	20.77%	26.37%	17.01%	19.72%
July 1, 2013 to June 30, 2015	27.87%	23.50%	28.16%	19.35%	22.08%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Winston-Dillard Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$974,965	$1,610,103
Allocated pre-SLGRP pooled liability/(surplus)	(188,682)	(206,096)
Transition liability/(surplus)	975,232	960,107
Allocated pooled OPSRP UAL	67,116	17,233
Side account	0	0
Net unfunded pension actuarial accrued liability	1,828,631	2,381,347
Combined valuation payroll	952,236	1,010,006
Net pension UAL as a percentage of payroll	192%	236%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	9.09%	8.18%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,978	$26,165
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	56,593	5,897
Total General Service		**0**	**0**		**56,593**	**5,897**
Tier 1 Police & Fire	17.89%	445,977	79,785	15.06%	497,540	74,930
Tier 2 Police & Fire	15.70%	361,883	56,816	15.12%	351,880	53,204
Total Police & Fire		**807,860**	**136,601**		**849,420**	**128,134**
Total		**$807,860**	**$136,601**		**$906,013**	**$134,031**
Employer normal cost rate						
General Service			**13.34%**			**10.42%**
Police & Fire			**16.91%**			**15.08%**
Aggregate (Default)			**16.91%**			**14.79%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$960,107
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	6.40%
B. Actual employer payroll	399,437
C. Payment to transition liability/(surplus)	25,564
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	6.40%
B. Actual employer payroll	492,965
C. Payment to transition liability/(surplus)	31,550
4. Supplemental payment to transition liability	0
5. Interest	72,239
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$975,232**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	975,232	960,107
2. Combined valuation payroll	952,236	1,010,006
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**9.09%**	**8.18%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	952,236	1,010,006
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Wickiup Water District/2817
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Wickiup Water District/2817

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Wickiup Water District/2817

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Wickiup Water District -- #2817

December 2013

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Executive Summary

Milliman has prepared this report for Wickiup Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Wickiup Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Wickiup Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.14%)	(0.14%)	(0.14%)	(0.14%)	(0.14%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.87%**	**16.28%**	**19.66%**	**10.30%**	**14.40%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.43%**	**16.84%**	**20.22%**	**10.78%**	**14.88%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.11%	14.11%	19.58%	10.35%	13.06%
July 1, 2013 to June 30, 2015	14.20%	12.97%	20.14%	11.32%	14.05%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Wickiup Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$89,428	$118,222
Allocated pre-SLGRP pooled liability/(surplus)	(17,307)	(15,133)
Transition liability/(surplus)	(1,426)	(1,528)
Allocated pooled OPSRP UAL	6,156	1,265
Side account	0	0
Net unfunded pension actuarial accrued liability	76,851	102,826
Combined valuation payroll	87,343	74,160
Net pension UAL as a percentage of payroll	88%	139%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.14%)	(0.18%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,832	$1,921
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,528)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.26%)
B. Actual employer payroll	39,726
C. Payment to transition liability/(surplus)	(103)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.26%)
B. Actual employer payroll	40,209
C. Payment to transition liability/(surplus)	(105)
4. Supplemental payment to transition liability	0
5. Interest	(106)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($1,426)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,426)	(1,528)
2. Combined valuation payroll	87,343	74,160
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.14%)**	**(0.18%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	87,343	74,160
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Western Lane Ambulance District/2754
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Western Lane Ambulance District/2754

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Western Lane Ambulance District/2754

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Western Lane Ambulance District -- #2754

December 2013

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Executive Summary

Milliman has prepared this report for Western Lane Ambulance District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Western Lane Ambulance District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Western Lane Ambulance District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.58%	12.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.24%)	(0.24%)	(0.24%)	(0.24%)	(0.24%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.42%**	**15.42%**	**19.56%**	**10.20%**	**14.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.98%**	**15.98%**	**20.12%**	**10.68%**	**14.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.05%	12.05%	19.54%	10.31%	13.02%
July 1, 2013 to June 30, 2015	12.26%	12.26%	19.16%	10.34%	13.07%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Western Lane Ambulance District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,209,376	$1,603,474
Allocated pre-SLGRP pooled liability/(surplus)	(234,047)	(205,247)
Transition liability/(surplus)	(31,661)	(32,626)
Allocated pooled OPSRP UAL	83,253	17,162
Side account	0	0
Net unfunded pension actuarial accrued liability	1,026,921	1,382,763
Combined valuation payroll	1,181,182	1,005,848
Net pension UAL as a percentage of payroll	87%	137%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.24%)	(0.28%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$24,782	$26,057
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$309,846	$48,956	5.78%	$375,319	$21,693
Tier 2 General Service	10.58%	498,147	52,704	10.42%	406,983	42,408
Total General Service		**807,993**	**101,660**		**782,302**	**64,101**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$807,993**	**$101,660**		**$782,302**	**$64,101**
Employer normal cost rate						
General Service			**12.58%**			**8.19%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.58%**			**8.19%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($32,626)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.30%)
B. Actual employer payroll	556,013
C. Payment to transition liability/(surplus)	(1,668)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.30%)
B. Actual employer payroll	547,289
C. Payment to transition liability/(surplus)	(1,642)
4. Supplemental payment to transition liability	0
5. Interest	(2,345)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($31,661)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(31,661)	(32,626)
2. Combined valuation payroll	1,181,182	1,005,848
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.24%)**	**(0.28%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,181,182	1,005,848
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

West Valley Housing Authority/2606
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
West Valley Housing Authority/2606

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
West Valley Housing Authority/2606

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

West Valley Housing Authority -- #2606

December 2013

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Executive Summary

Milliman has prepared this report for West Valley Housing Authority to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to West Valley Housing Authority.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for West Valley Housing Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.49%	13.49%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.50%)	(3.50%)	(3.50%)	(3.50%)	(3.50%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.83%**	**14.83%**	**18.06%**	**8.70%**	**12.80%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.39%**	**15.39%**	**18.62%**	**9.18%**	**13.28%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.26%	10.26%	18.27%	9.04%	11.75%
July 1, 2013 to June 30, 2015	10.55%	10.55%	18.07%	9.25%	11.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

West Valley Housing Authority

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$961,879	$1,648,892
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(370,283)	(376,190)
Allocated pooled OPSRP UAL	66,215	17,648
Side account	0	0
Net unfunded pension actuarial accrued liability	657,811	1,290,350
Combined valuation payroll	939,455	1,034,338
Net pension UAL as a percentage of payroll	70%	125%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.50%)	(3.13%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,710	$26,795
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$329,348	$52,037	5.78%	$408,580	$23,616
Tier 2 General Service	10.58%	260,543	27,565	10.42%	257,013	26,781
Total General Service		**589,891**	**79,602**		**665,593**	**50,397**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$589,891**	**$79,602**		**$665,593**	**$50,397**
Employer normal cost rate						
General Service			**13.49%**			**7.57%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.49%**			**7.57%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($376,190)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.27%)
B. Actual employer payroll	506,202
C. Payment to transition liability/(surplus)	(16,553)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.27%)
B. Actual employer payroll	513,218
C. Payment to transition liability/(surplus)	(16,782)
4. Supplemental payment to transition liability	0
5. Interest	(27,428)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($370,283)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(370,283)	(376,190)
2. Combined valuation payroll	939,455	1,034,338
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.50%)**	**(3.13%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	939,455	1,034,338
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

West Slope Water District/2589
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
West Slope Water District/2589

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
West Slope Water District/2589

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

West Slope Water District -- #2589

December 2013

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Executive Summary

Milliman has prepared this report for West Slope Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to West Slope Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for West Slope Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.14%	12.14%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	4.12%	4.12%	4.12%	4.12%	4.12%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.10%**	**21.10%**	**25.68%**	**16.32%**	**20.42%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.66%**	**21.66%**	**26.24%**	**16.80%**	**20.90%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	19.34%	19.34%	25.81%	16.58%	19.29%
July 1, 2013 to June 30, 2015	19.16%	19.16%	24.95%	16.13%	18.86%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

West Slope Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$481,739	$814,704
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	218,402	222,950
Allocated pooled OPSRP UAL	33,163	8,720
Side account	0	0
Net unfunded pension actuarial accrued liability	733,304	1,046,374
Combined valuation payroll	470,508	511,058
Net pension UAL as a percentage of payroll	156%	205%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	4.12%	3.75%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,871	$13,239
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$95,525	$15,093	5.78%	$88,806	$5,133
Tier 2 General Service	10.58%	223,524	23,649	10.42%	278,061	28,974
Total General Service		**319,049**	**38,742**		**366,867**	**34,107**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$319,049**	**$38,742**		**$366,867**	**$34,107**
Employer normal cost rate						
General Service			**12.14%**			**9.30%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.14%**			**9.30%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$222,950
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	4.27%
B. Actual employer payroll	234,381
C. Payment to transition liability/(surplus)	10,008
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	4.27%
B. Actual employer payroll	251,005
C. Payment to transition liability/(surplus)	10,718
4. Supplemental payment to transition liability	0
5. Interest	16,178
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$218,402**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	218,402	222,950
2. Combined valuation payroll	470,508	511,058
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**4.12%**	**3.75%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	470,508	511,058
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Portland, OR 97204-3654
503 227 0634

December 2013

West Multnomah Soil And Water Conservation District/2867
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
West Multnomah Soil And Water Conservation District/2867

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
West Multnomah Soil And Water Conservation District/2867

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

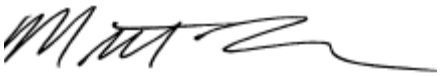
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

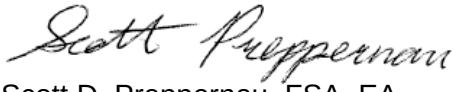
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

West Multnomah Soil And Water Conservation District -- #2867

December 2013

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Executive Summary

Milliman has prepared this report for West Multnomah Soil And Water Conservation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to West Multnomah Soil And Water Conservation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for West Multnomah Soil And Water Conservation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.42%**	**15.42%**	**21.56%**	**12.20%**	**16.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.98%**	**15.98%**	**22.12%**	**12.68%**	**16.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.48%	13.48%	21.54%	12.31%	15.02%
July 1, 2013 to June 30, 2015	13.55%	13.55%	21.30%	12.48%	15.21%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

West Multnomah Soil And Water Conservation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$390,950	$671,350
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	26,913	7,186
Side account	0	0
Net unfunded pension actuarial accrued liability	417,863	678,536
Combined valuation payroll	381,836	421,133
Net pension UAL as a percentage of payroll	109%	161%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.00%	0.00%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,011	$10,910
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$80,020	$4,625
Tier 2 General Service	10.58%	42,040	4,448	10.42%	40,631	4,234
Total General Service		**42,040**	**4,448**		**120,651**	**8,859**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$42,040**	**$4,448**		**$120,651**	**$8,859**
Employer normal cost rate						
General Service			**10.58%**			**7.34%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**7.34%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	381,836	421,133
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	381,836	421,133
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

West Extension Irrigation District/2540
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
West Extension Irrigation District/2540

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
West Extension Irrigation District/2540

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

West Extension Irrigation District -- #2540

December 2013

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Executive Summary

Milliman has prepared this report for West Extension Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to West Extension Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for West Extension Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(4.82%)	(4.82%)	(4.82%)	(4.82%)	(4.82%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**8.84%**	**8.84%**	**14.98%**	**5.62%**	**9.72%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**9.40%**	**9.40%**	**15.54%**	**6.10%**	**10.20%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.75%	8.75%	14.22%	4.99%	7.70%
July 1, 2013 to June 30, 2015	10.07%	10.07%	14.74%	5.92%	8.65%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

West Extension Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$362,820	$579,320
Allocated pre-SLGRP pooled liability/(surplus)	(70,216)	(74,154)
Transition liability/(surplus)	(192,678)	(198,436)
Allocated pooled OPSRP UAL	24,976	6,201
Side account	0	0
Net unfunded pension actuarial accrued liability	124,902	312,931
Combined valuation payroll	354,362	363,403
Net pension UAL as a percentage of payroll	35%	86%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(4.82%)	(4.70%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$7,435	$9,414
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	190,299	20,134	10.42%	201,359	20,982
Total General Service		**190,299**	**20,134**		**201,359**	**20,982**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$190,299**	**$20,134**		**$201,359**	**$20,982**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($198,436)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.62%)
B. Actual employer payroll	181,574
C. Payment to transition liability/(surplus)	(10,204)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.62%)
B. Actual employer payroll	174,825
C. Payment to transition liability/(surplus)	(9,826)
4. Supplemental payment to transition liability	0
5. Interest	(14,272)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($192,678)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(192,678)	(198,436)
2. Combined valuation payroll	354,362	363,403
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.82%)**	**(4.70%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	354,362	363,403
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Washington County/2011
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Washington County/2011

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Washington County/2011

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Washington County -- #2011

December 2013

Secondary Employers

2046 Washington County Fair Board

2532 Metzger Sanitary District

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Executive Summary

Milliman has prepared this report for Washington County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Washington County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Washington County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.15%	13.05%	16.57%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.03%	0.03%	0.03%	0.03%	0.03%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.26%**	**16.16%**	**19.68%**	**10.47%**	**14.57%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.82%**	**16.72%**	**20.24%**	**10.95%**	**15.05%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.46%	12.25%	19.83%	10.65%	13.36%
July 1, 2013 to June 30, 2015	14.64%	12.52%	19.49%	10.66%	13.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Washington County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$119,655,962	$179,857,284
Allocated pre-SLGRP pooled liability/(surplus)	(23,156,663)	(23,022,000)
Transition liability/(surplus)	454,557	467,489
Allocated pooled OPSRP UAL	8,237,071	1,925,031
Side account	0	0
Net unfunded pension actuarial accrued liability	105,190,927	159,227,804
Combined valuation payroll	116,866,478	112,823,192
Net pension UAL as a percentage of payroll	90%	141%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.03%	0.04%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,451,908	$2,922,742
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$23,822,563	$3,763,965	5.78%	$25,502,393	$1,474,038
Tier 2 General Service	10.58%	26,518,352	2,805,642	10.42%	26,279,957	2,738,372
Total General Service		**50,340,915**	**6,569,607**		**51,782,350**	**4,212,410**
Tier 1 Police & Fire	17.89%	9,147,846	1,636,550	15.06%	8,886,266	1,338,272
Tier 2 Police & Fire	15.70%	13,855,777	2,175,357	15.12%	13,765,302	2,081,314
Total Police & Fire		**23,003,623**	**3,811,907**		**22,651,568**	**3,419,586**
Total		**$73,344,538**	**$10,381,514**		**$74,433,918**	**$7,631,996**
Employer normal cost rate						
General Service			**13.05%**			**8.13%**
Police & Fire			**16.57%**			**15.10%**
Aggregate (Default)			**14.15%**			**10.25%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$467,489
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.04%
B. Actual employer payroll	57,201,774
C. Payment to transition liability/(surplus)	22,881
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.04%
B. Actual employer payroll	59,304,955
C. Payment to transition liability/(surplus)	23,722
4. Supplemental payment to transition liability	0
5. Interest	33,671
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$454,557**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	454,557	467,489
2. Combined valuation payroll	116,866,478	112,823,192
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.03%**	**0.04%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	116,866,478	112,823,192
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Washington County Fire District #2/2578
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Washington County Fire District #2/2578

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Washington County Fire District #2/2578

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

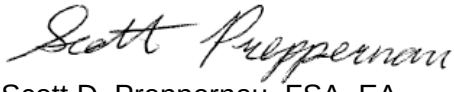
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Washington County Fire District #2 -- #2578

December 2013

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Executive Summary

Milliman has prepared this report for Washington County Fire District #2 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Washington County Fire District #2.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Washington County Fire District #2

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.99%	13.34%	15.99%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.69%	0.69%	0.69%	0.69%	0.69%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.52%**	**18.87%**	**21.52%**	**12.89%**	**16.99%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**22.08%**	**19.43%**	**22.08%**	**13.37%**	**17.47%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	21.68%	14.21%	21.68%	12.76%	15.47%
July 1, 2013 to June 30, 2015	22.00%	14.81%	22.00%	13.16%	15.89%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Washington County Fire District #2

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,310,671	$1,922,042
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	99,991	98,230
Allocated pooled OPSRP UAL	90,226	20,572
Side account	0	0
Net unfunded pension actuarial accrued liability	1,500,888	2,040,844
Combined valuation payroll	1,280,116	1,205,683
Net pension UAL as a percentage of payroll	117%	169%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.69%	0.70%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$26,857	$31,234
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	107,522	19,236	15.06%	105,954	15,957
Tier 2 Police & Fire	15.70%	718,631	112,825	15.12%	677,568	102,448
Total Police & Fire		**826,153**	**132,061**		**783,522**	**118,405**
Total		**$826,153**	**$132,061**		**$783,522**	**$118,405**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.99%**			**15.11%**
Aggregate (Default)			**15.99%**			**15.11%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$98,230
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.45%
B. Actual employer payroll	617,099
C. Payment to transition liability/(surplus)	2,777
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.45%
B. Actual employer payroll	637,748
C. Payment to transition liability/(surplus)	2,869
4. Supplemental payment to transition liability	0
5. Interest	7,407
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$99,991**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	99,991	98,230
2. Combined valuation payroll	1,280,116	1,205,683
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.69%**	**0.70%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,280,116	1,205,683
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Washington County Consolidated Communications Agency/2695
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Washington County Consolidated Communications Agency/2695

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Washington County Consolidated Communications Agency/2695

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Washington County Consolidated Communications Agency -- #2695

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Washington County Consolidated Communications Agency to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Washington County Consolidated Communications

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Washington County Consolidated Communications Agency

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.01%	12.86%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.67%	0.67%	0.67%	0.67%	0.67%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.76%**	**16.61%**	**21.64%**	**11.11%**	**15.21%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.32%**	**17.17%**	**22.20%**	**11.59%**	**15.69%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.24%	13.06%	21.02%	11.37%	14.08%
July 1, 2013 to June 30, 2015	13.51%	13.32%	20.08%	11.29%	14.02%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Washington County Consolidated Communications Agency

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$6,726,971	$10,274,721
Allocated pre-SLGRP pooled liability/(surplus)	(1,301,851)	(1,315,180)
Transition liability/(surplus)	493,339	505,644
Allocated pooled OPSRP UAL	463,082	109,971
Side account	0	0
Net unfunded pension actuarial accrued liability	6,381,541	9,575,156
Combined valuation payroll	6,570,148	6,445,259
Net pension UAL as a percentage of payroll	97%	149%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.67%	0.67%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$137,844	$166,968
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,498,874	$236,822	5.78%	$1,651,158	$95,437
Tier 2 General Service	10.58%	1,937,070	204,942	10.42%	1,955,259	203,738
Total General Service		**3,435,944**	**441,764**		**3,606,417**	**299,175**
Tier 1 Police & Fire	17.89%	111,153	19,885	15.06%	107,280	16,156
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**111,153**	**19,885**		**107,280**	**16,156**
Total		**$3,547,097**	**$461,649**		**$3,713,697**	**$315,331**
Employer normal cost rate						
General Service			**12.86%**			**8.30%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**13.01%**			**8.49%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$505,644
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.76%
B. Actual employer payroll	3,130,073
C. Payment to transition liability/(surplus)	23,789
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.76%
B. Actual employer payroll	3,297,416
C. Payment to transition liability/(surplus)	25,060
4. Supplemental payment to transition liability	0
5. Interest	36,544
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$493,339**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	493,339	505,644
2. Combined valuation payroll	6,570,148	6,445,259
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.67%**	**0.67%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	6,570,148	6,445,259
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Wasco County/2020
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Wasco County/2020

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
Wasco County/2020

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Wasco County -- #2020

December 2013

Secondary Employers

2049 Columbia Basin Nursing Home

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Executive Summary

Milliman has prepared this report for Wasco County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Wasco County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Wasco County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.55%	14.01%	16.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.73%)	(1.73%)	(1.73%)	(1.73%)	(1.73%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.90%**	**15.36%**	**18.05%**	**8.71%**	**12.81%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.46%**	**15.92%**	**18.61%**	**9.19%**	**13.29%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.22%	10.14%	18.34%	9.00%	11.71%
July 1, 2013 to June 30, 2015	12.05%	10.34%	18.13%	9.31%	12.04%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Wasco County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$7,187,492	$10,540,043
Allocated pre-SLGRP pooled liability/(surplus)	(1,390,974)	(1,349,141)
Transition liability/(surplus)	(1,367,596)	(1,379,592)
Allocated pooled OPSRP UAL	494,784	112,811
Side account	0	0
Net unfunded pension actuarial accrued liability	4,923,706	7,924,121
Combined valuation payroll	7,019,933	6,611,694
Net pension UAL as a percentage of payroll	70%	120%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.73%)	(1.79%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$147,281	$171,279
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,236,140	$353,310	5.78%	$2,191,985	$126,697
Tier 2 General Service	10.58%	1,163,896	123,140	10.42%	1,068,391	111,326
Total General Service		**3,400,036**	**476,450**		**3,260,376**	**238,023**
Tier 1 Police & Fire	17.89%	386,266	69,103	15.06%	403,157	60,715
Tier 2 Police & Fire	15.70%	456,473	71,666	15.12%	509,954	77,105
Total Police & Fire		**842,739**	**140,769**		**913,111**	**137,820**
Total		**$4,242,775**	**$617,219**		**$4,173,487**	**$375,843**
Employer normal cost rate						
General Service			**14.01%**			**7.30%**
Police & Fire			**16.70%**			**15.09%**
Aggregate (Default)			**14.55%**			**9.01%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,379,592)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.61%)
B. Actual employer payroll	3,502,486
C. Payment to transition liability/(surplus)	(56,390)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.61%)
B. Actual employer payroll	3,534,724
C. Payment to transition liability/(surplus)	(56,909)
4. Supplemental payment to transition liability	0
5. Interest	(101,303)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,367,596)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,367,596)	(1,379,592)
2. Combined valuation payroll	7,019,933	6,611,694
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.73%)**	**(1.79%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	7,019,933	6,611,694
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Portland, OR 97204-3654
503 227 0634

December 2013

Wasco County Soil-Water Conservation District/2826
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Wasco County Soil-Water Conservation District/2826

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Wasco County Soil-Water Conservation District/2826

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Wasco County Soil-Water Conservation District -- #2826

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Wasco County Soil-Water Conservation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Wasco County Soil-Water Conservation District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Wasco County Soil-Water Conservation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.90%)	(4.90%)	(4.90%)	(4.90%)	(4.90%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.52%**	**10.52%**	**16.66%**	**7.30%**	**11.40%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.08%**	**11.08%**	**17.22%**	**7.78%**	**11.88%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.31%	10.31%	15.78%	6.55%	9.26%
July 1, 2013 to June 30, 2015	11.55%	11.55%	16.22%	7.40%	10.13%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Wasco County Soil-Water Conservation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$409,479	$622,704
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(220,750)	(226,360)
Allocated pooled OPSRP UAL	28,188	6,665
Side account	0	0
Net unfunded pension actuarial accrued liability	216,917	403,009
Combined valuation payroll	399,933	390,618
Net pension UAL as a percentage of payroll	54%	103%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.90%)	(4.98%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,391	$10,119
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	274,541	29,046	10.42%	270,659	28,203
Total General Service		**274,541**	**29,046**		**270,659**	**28,203**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$274,541**	**$29,046**		**$270,659**	**$28,203**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($226,360)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.76%)
B. Actual employer payroll	188,405
C. Payment to transition liability/(surplus)	(10,852)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.76%)
B. Actual employer payroll	192,884
C. Payment to transition liability/(surplus)	(11,110)
4. Supplemental payment to transition liability	0
5. Interest	(16,352)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($220,750)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(220,750)	(226,360)
2. Combined valuation payroll	399,933	390,618
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.90%)**	**(4.98%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	399,933	390,618
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Umpqua Community College/2903
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Umpqua Community College/2903

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Umpqua Community College/2903

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Umpqua Community College -- #2903

December 2013

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Executive Summary

Milliman has prepared this report for Umpqua Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Umpqua Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Umpqua Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(7.29%)	(7.29%)	(7.29%)	(7.29%)	(7.29%)
Net pension contribution rate	**12.55%**	**12.55%**	**16.12%**	**6.76%**	**10.86%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.11%**	**13.11%**	**16.68%**	**7.24%**	**11.34%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.99%	8.99%	16.65%	7.42%	10.13%
July 1, 2013 to June 30, 2015	9.50%	9.50%	16.52%	7.70%	10.43%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Umpqua Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$12,189,066	$19,397,970
Allocated pre-SLGRP pooled liability/(surplus)	2,482,059	2,636,359
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	839,091	207,618
Side account	9,781,470	9,251,603
Net unfunded pension actuarial accrued liability	5,728,746	12,990,344
Combined valuation payroll	11,904,908	12,168,208
Net pension UAL as a percentage of payroll	48%	107%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(7.29%)	(6.54%)
Allocated pooled RHIA UAL	$249,770	$315,224
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$9,251,603**	**$9,251,603**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(774,791)	(774,791)
5. Side account earnings during 2012		1,305,658	1,305,658
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$9,781,470**	**$9,781,470**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$9,781,470	$9,251,603
Side Account 2	0	0
Side Account 3	0	0
Total	**$9,781,470**	**$9,251,603**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$9,781,470	$9,251,603
2. Combined valuation payroll	11,904,908	12,168,208
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(7.29%)	(6.54%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Umatilla Fire Department/2653
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Umatilla Fire Department/2653

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Umatilla Fire Department/2653

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Umatilla Fire Department -- #2653

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Umatilla Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Umatilla Fire Department.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Umatilla Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.70%)	(4.70%)	(4.70%)	(4.70%)	(4.70%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.03%**	**13.48%**	**18.03%**	**7.50%**	**11.60%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.59%**	**14.04%**	**18.59%**	**7.98%**	**12.08%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.38%	4.18%	12.38%	2.73%	5.44%
July 1, 2013 to June 30, 2015	14.39%	7.25%	14.39%	5.60%	8.33%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Umatilla Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$153,394	$154,287
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(79,413)	(85,919)
Allocated pooled OPSRP UAL	10,560	1,651
Side account	0	0
Net unfunded pension actuarial accrued liability	84,541	70,019
Combined valuation payroll	149,818	96,783
Net pension UAL as a percentage of payroll	56%	72%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.70%)	(7.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,143	$2,507
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	82,145	14,696	15.06%	90,385	13,612
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**82,145**	**14,696**		**90,385**	**13,612**
Total		**$82,145**	**$14,696**		**$90,385**	**$13,612**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($85,919)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.58%)
B. Actual employer payroll	54,161
C. Payment to transition liability/(surplus)	(5,189)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.58%)
B. Actual employer payroll	75,151
C. Payment to transition liability/(surplus)	(7,199)
4. Supplemental payment to transition liability	0
5. Interest	(5,882)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($79,413)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(79,413)	(85,919)
2. Combined valuation payroll	149,818	96,783
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.70%)**	**(7.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	149,818	96,783
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
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December 2013

Umatilla County/2013
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Umatilla County/2013

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Umatilla County/2013

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Umatilla County -- #2013

December 2013

Secondary Employers

2048 Umatilla County Fair Board

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Executive Summary

Milliman has prepared this report for Umatilla County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Umatilla County.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Umatilla County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.20%	13.15%	16.59%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(5.90%)	(5.90%)	(5.90%)	(5.90%)	(5.90%)
Net pension contribution rate	**11.38%**	**10.33%**	**13.77%**	**4.54%**	**8.64%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.94%**	**10.89%**	**14.33%**	**5.02%**	**9.12%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.04%	7.16%	14.60%	5.46%	8.17%
July 1, 2013 to June 30, 2015	9.01%	7.03%	13.98%	5.15%	7.88%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Umatilla County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$14,157,188	$21,743,445
Allocated pre-SLGRP pooled liability/(surplus)	(2,739,799)	(2,783,193)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	974,575	232,722
Side account	9,194,371	8,672,688
Net unfunded pension actuarial accrued liability	3,197,593	10,520,286
Combined valuation payroll	13,827,148	13,639,508
Net pension UAL as a percentage of payroll	23%	77%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	(5.90%)	(5.47%)
Allocated pooled RHIA UAL	$290,099	$353,338
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,831,566	$447,387	5.78%	$3,098,311	$179,082
Tier 2 General Service	10.58%	2,918,070	308,732	10.42%	3,234,004	336,983
Total General Service		**5,749,636**	**756,119**		**6,332,315**	**516,065**
Tier 1 Police & Fire	17.89%	1,032,102	184,643	15.06%	1,030,435	155,184
Tier 2 Police & Fire	15.70%	1,501,187	235,686	15.12%	1,500,674	226,902
Total Police & Fire		**2,533,289**	**420,329**		**2,531,109**	**382,086**
Total		**$8,282,925**	**$1,176,448**		**$8,863,424**	**$898,151**
Employer normal cost rate						
General Service			**13.15%**			**8.15%**
Police & Fire			**16.59%**			**15.10%**
Aggregate (Default)			**14.20%**			**10.13%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	13,827,148	13,639,508
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$8,672,688**	**$8,672,688**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(700,665)	(700,665)
5. Side account earnings during 2012		1,223,349	1,223,349
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$9,194,371**	**$9,194,371**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$9,194,371	$8,672,688
Side Account 2	0	0
Side Account 3	0	0
Total	**$9,194,371**	**$8,672,688**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$9,194,371	$8,672,688
2. Combined valuation payroll	13,827,148	13,639,508
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(5.90%)	(5.47%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Umatilla County Special Library District/2732
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Umatilla County Special Library District/2732

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Umatilla County Special Library District/2732

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Umatilla County Special Library District -- #2732

December 2013

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Executive Summary

Milliman has prepared this report for Umatilla County Special Library District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Umatilla County Special Library District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Umatilla County Special Library District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(8.77%)	(8.77%)	(8.77%)	(8.77%)	(8.77%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.87%**	**11.87%**	**12.79%**	**3.43%**	**7.53%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.43%**	**12.43%**	**13.35%**	**3.91%**	**8.01%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.04%	4.04%	13.60%	4.37%	7.08%
July 1, 2013 to June 30, 2015	3.18%	3.18%	12.49%	3.67%	6.40%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Umatilla County Special Library District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$144,271	$214,906
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(139,350)	(139,076)
Allocated pooled OPSRP UAL	9,932	2,300
Side account	0	0
Net unfunded pension actuarial accrued liability	14,853	78,130
Combined valuation payroll	140,908	134,809
Net pension UAL as a percentage of payroll	11%	58%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(8.77%)	(8.87%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,956	$3,492
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$39,175	$6,190	5.78%	$134,809	$7,792
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**39,175**	**6,190**		**134,809**	**7,792**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$39,175**	**$6,190**		**$134,809**	**$7,792**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($139,076)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.94%)
B. Actual employer payroll	71,015
C. Payment to transition liability/(surplus)	(5,639)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.94%)
B. Actual employer payroll	55,534
C. Payment to transition liability/(surplus)	(4,409)
4. Supplemental payment to transition liability	0
5. Interest	(10,322)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($139,350)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(139,350)	(139,076)
2. Combined valuation payroll	140,908	134,809
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.77%)**	**(8.87%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	140,908	134,809
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Umatilla County Soil & Water District/2772
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Umatilla County Soil & Water District/2772

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Umatilla County Soil & Water District/2772

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Umatilla County Soil & Water District -- #2772

December 2013

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Executive Summary

Milliman has prepared this report for Umatilla County Soil & Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Umatilla County Soil & Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Umatilla County Soil & Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.79%)	(2.79%)	(2.79%)	(2.79%)	(2.79%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.22%**	**13.63%**	**17.01%**	**7.65%**	**11.75%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.78%**	**14.19%**	**17.57%**	**8.13%**	**12.23%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.71%	11.71%	17.18%	7.95%	10.66%
July 1, 2013 to June 30, 2015	8.96%	7.73%	14.90%	6.08%	8.81%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Umatilla County Soil & Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$143,389	$109,529
Allocated pre-SLGRP pooled liability/(surplus)	(27,750)	(14,020)
Transition liability/(surplus)	(44,085)	(43,286)
Allocated pooled OPSRP UAL	9,871	1,172
Side account	0	0
Net unfunded pension actuarial accrued liability	81,425	53,395
Combined valuation payroll	140,046	68,707
Net pension UAL as a percentage of payroll	58%	78%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.79%)	(5.42%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,938	$1,780
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($43,286)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.66%)
B. Actual employer payroll	40,454
C. Payment to transition liability/(surplus)	(1,076)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.66%)
B. Actual employer payroll	52,294
C. Payment to transition liability/(surplus)	(1,391)
4. Supplemental payment to transition liability	0
5. Interest	(3,266)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($44,085)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(44,085)	(43,286)
2. Combined valuation payroll	140,046	68,707
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.79%)**	**(5.42%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	140,046	68,707
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Portland, OR 97204-3654
503 227 0634

December 2013

Tualatin Valley Water District/2842
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Tualatin Valley Water District/2842

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Tualatin Valley Water District/2842

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Tualatin Valley Water District -- #2842

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Tualatin Valley Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Tualatin Valley Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Tualatin Valley Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.01%	13.01%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.50%)	(3.50%)	(3.50%)	(3.50%)	(3.50%)
Side account rate relief [2]	(1.29%)	(1.29%)	(1.29%)	(1.29%)	(1.29%)
Net pension contribution rate	**13.06%**	**13.06%**	**16.77%**	**7.41%**	**11.51%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.62%**	**13.62%**	**17.33%**	**7.89%**	**11.99%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.74%	8.74%	16.22%	6.99%	9.70%
July 1, 2013 to June 30, 2015	9.50%	9.50%	16.35%	7.53%	10.26%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Tualatin Valley Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$8,627,586	$12,956,988
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,320,051)	(3,412,828)
Allocated pooled OPSRP UAL	593,920	138,680
Side account	1,224,587	1,173,238
Net unfunded pension actuarial accrued liability	4,676,868	8,509,602
Combined valuation payroll	8,426,455	8,127,826
Net pension UAL as a percentage of payroll	56%	105%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.50%)	(3.61%)
Side account rate relief	(1.29%)	(1.24%)
Allocated pooled RHIA UAL	$176,791	$210,555
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,648,339	$418,438	5.78%	$2,709,738	$156,623
Tier 2 General Service	10.58%	3,042,743	321,922	10.42%	3,053,597	318,185
Total General Service		**5,691,082**	**740,360**		**5,763,335**	**474,808**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$5,691,082**	**$740,360**		**$5,763,335**	**$474,808**
Employer normal cost rate						
General Service			**13.01%**			**8.24%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.01%**			**8.24%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,412,828)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.97%)
B. Actual employer payroll	4,194,841
C. Payment to transition liability/(surplus)	(166,535)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.97%)
B. Actual employer payroll	4,336,819
C. Payment to transition liability/(surplus)	(172,172)
4. Supplemental payment to transition liability	0
5. Interest	(245,930)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($3,320,051)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,320,051)	(3,412,828)
2. Combined valuation payroll	8,426,455	8,127,826
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.50%)**	**(3.61%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$1,173,238**	**$1,173,238**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(112,116)	(112,116)
5. Side account earnings during 2012		164,465	164,465
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$1,224,587**	**$1,224,587**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$1,224,587	$1,173,238
Side Account 2	0	0
Side Account 3	0	0
Total	**$1,224,587**	**$1,173,238**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$1,224,587	$1,173,238
2. Combined valuation payroll	8,426,455	8,127,826
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(1.29%)	(1.24%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Tualatin Valley Irrigation District/2587
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Tualatin Valley Irrigation District/2587

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Tualatin Valley Irrigation District/2587

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Tualatin Valley Irrigation District -- #2587

December 2013

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Executive Summary

Milliman has prepared this report for Tualatin Valley Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Tualatin Valley Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Tualatin Valley Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.29%	13.29%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.24%)	(5.24%)	(5.24%)	(5.24%)	(5.24%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.89%**	**12.89%**	**16.32%**	**6.96%**	**11.06%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.45%**	**13.45%**	**16.88%**	**7.44%**	**11.54%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.04%	10.04%	18.95%	9.72%	12.43%
July 1, 2013 to June 30, 2015	8.73%	8.73%	16.73%	7.91%	10.64%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Tualatin Valley Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$244,690	$428,532
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(141,052)	(139,549)
Allocated pooled OPSRP UAL	16,844	4,587
Side account	0	0
Net unfunded pension actuarial accrued liability	120,482	293,570
Combined valuation payroll	238,986	268,815
Net pension UAL as a percentage of payroll	50%	109%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.24%)	(4.47%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,014	$6,964
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$49,067	$7,753	5.78%	$114,153	$6,598
Tier 2 General Service	10.58%	45,381	4,801	10.42%	44,707	4,658
Total General Service		**94,448**	**12,554**		**158,860**	**11,256**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$94,448**	**$12,554**		**$158,860**	**$11,256**
Employer normal cost rate						
General Service			**13.29%**			**7.09%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.29%**			**7.09%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($139,549)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.59%)
B. Actual employer payroll	169,729
C. Payment to transition liability/(surplus)	(4,396)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.59%)
B. Actual employer payroll	175,651
C. Payment to transition liability/(surplus)	(4,549)
4. Supplemental payment to transition liability	0
5. Interest	(10,448)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($141,052)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(141,052)	(139,549)
2. Combined valuation payroll	238,986	268,815
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.24%)**	**(4.47%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	238,986	268,815
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Tualatin Valley Fire & Rescue/2660
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Tualatin Valley Fire & Rescue/2660

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Tualatin Valley Fire & Rescue/2660

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Tualatin Valley Fire & Rescue -- #2660

December 2013

Secondary Employers

2730 Tualatin Rural Fire District

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Tualatin Valley Fire & Rescue to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Tualatin Valley Fire & Rescue.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Tualatin Valley Fire & Rescue

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.34%	13.21%	16.73%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(3.75%)	(3.75%)	(3.75%)	(3.75%)	(3.75%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.67%**	**12.54%**	**16.06%**	**6.69%**	**10.79%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.23%**	**13.10%**	**16.62%**	**7.17%**	**11.27%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.11%	8.30%	15.92%	6.67%	9.38%
July 1, 2013 to June 30, 2015	15.33%	9.19%	16.08%	7.26%	9.99%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Tualatin Valley Fire & Rescue

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$44,160,175	$68,069,495
Allocated pre-SLGRP pooled liability/(surplus)	(8,546,187)	(8,712,996)
Transition liability/(surplus)	(18,235,080)	(18,532,799)
Allocated pooled OPSRP UAL	3,039,970	728,555
Side account	0	0
Net unfunded pension actuarial accrued liability	20,418,878	41,552,255
Combined valuation payroll	43,130,689	42,699,509
Net pension UAL as a percentage of payroll	47%	97%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(3.75%)	(3.73%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$904,900	$1,106,152
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$1,674,163	$264,518	5.78%	$1,586,887	$91,722
Tier 2 General Service	10.58%	1,650,951	174,671	10.42%	1,723,111	179,548
Total General Service		**3,325,114**	**439,189**		**3,309,998**	**271,270**
Tier 1 Police & Fire	17.89%	12,372,274	2,213,400	15.06%	13,075,730	1,969,205
Tier 2 Police & Fire	15.70%	13,913,667	2,184,446	15.12%	14,020,217	2,119,857
Total Police & Fire		**26,285,941**	**4,397,846**		**27,095,947**	**4,089,062**
Total		**$29,611,055**	**$4,837,035**		**$30,405,945**	**$4,360,332**
Employer normal cost rate						
General Service			**13.21%**			**8.20%**
Police & Fire			**16.73%**			**15.09%**
Aggregate (Default)			**16.34%**			**14.34%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($18,532,799)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.94%)
B. Actual employer payroll	20,503,676
C. Payment to transition liability/(surplus)	(807,845)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.94%)
B. Actual employer payroll	21,335,557
C. Payment to transition liability/(surplus)	(840,621)
4. Supplemental payment to transition liability	0
5. Interest	(1,350,747)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($18,235,080)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(18,235,080)	(18,532,799)
2. Combined valuation payroll	43,130,689	42,699,509
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.75%)**	**(3.73%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	43,130,689	42,699,509
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Tri-City Water and Sanitary Authority/2864
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Tri-City Water and Sanitary Authority/2864

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Tri-City Water and Sanitary Authority/2864

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Tri-City Water and Sanitary Authority -- #2864

December 2013

Secondary Employers

2690 Tri City Sanitary

2691 Tri City Water

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Executive Summary

Milliman has prepared this report for Tri-City Water and Sanitary Authority to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Tri-City Water and Sanitary Authority.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Tri-City Water and Sanitary Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.34%)	(2.34%)	(2.34%)	(2.34%)	(2.34%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.32%**	**11.32%**	**17.46%**	**8.10%**	**12.20%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.88%**	**11.88%**	**18.02%**	**8.58%**	**12.68%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.98%	9.98%	17.61%	8.38%	11.09%
July 1, 2013 to June 30, 2015	10.40%	10.40%	17.48%	8.66%	11.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Tri-City Water and Sanitary Authority

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$306,546	$568,117
Allocated pre-SLGRP pooled liability/(surplus)	(59,325)	(72,720)
Transition liability/(surplus)	(79,034)	(81,320)
Allocated pooled OPSRP UAL	21,103	6,081
Side account	0	0
Net unfunded pension actuarial accrued liability	189,290	420,158
Combined valuation payroll	299,400	356,376
Net pension UAL as a percentage of payroll	63%	118%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.34%)	(1.96%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,282	$9,232
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$73,503	$4,248
Tier 2 General Service	10.58%	67,840	7,177	10.42%	68,212	7,108
Total General Service		**67,840**	**7,177**		**141,715**	**11,356**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$67,840**	**$7,177**		**$141,715**	**$11,356**
Employer normal cost rate						
General Service			**10.58%**			**8.01%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**8.01%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($81,320)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.23%)
B. Actual employer payroll	190,061
C. Payment to transition liability/(surplus)	(4,238)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.23%)
B. Actual employer payroll	174,961
C. Payment to transition liability/(surplus)	(3,902)
4. Supplemental payment to transition liability	0
5. Interest	(5,854)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($79,034)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(79,034)	(81,320)
2. Combined valuation payroll	299,400	356,376
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.34%)**	**(1.96%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	299,400	356,376
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Treasure Valley Community College/2902
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Treasure Valley Community College/2902

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Treasure Valley Community College/2902

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Treasure Valley Community College -- #2902

December 2013

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Executive Summary

Milliman has prepared this report for Treasure Valley Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Treasure Valley Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Treasure Valley Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(10.66%)	(10.66%)	(10.66%)	(10.66%)	(10.66%)
Net pension contribution rate	**9.18%**	**9.18%**	**12.75%**	**3.39%**	**7.49%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**9.74%**	**9.74%**	**13.31%**	**3.87%**	**7.97%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.18%	5.18%	12.84%	3.61%	6.32%
July 1, 2013 to June 30, 2015	5.58%	5.58%	12.60%	3.78%	6.51%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Treasure Valley Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$9,958,249	$15,000,740
Allocated pre-SLGRP pooled liability/(surplus)	2,027,798	2,038,736
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	685,522	160,554
Side account	11,689,045	11,439,490
Net unfunded pension actuarial accrued liability	982,524	5,760,540
Combined valuation payroll	9,726,097	9,409,857
Net pension UAL as a percentage of payroll	10%	61%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(10.66%)	(10.46%)
Allocated pooled RHIA UAL	$204,058	$243,767
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$11,439,490**	**$11,439,490**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,339,773)	(1,339,773)
5. Side account earnings during 2012		1,590,328	1,590,328
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$11,689,045**	**$11,689,045**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$11,689,045	$11,439,490
Side Account 2	0	0
Side Account 3	0	0
Total	**$11,689,045**	**$11,439,490**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$11,689,045	$11,439,490
2. Combined valuation payroll	9,726,097	9,409,857
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(10.66%)	(10.46%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Town of Lakeview/2212
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Town of Lakeview/2212

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Town of Lakeview/2212

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Town of Lakeview -- #2212

December 2013

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Executive Summary

Milliman has prepared this report for Town of Lakeview to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Town of Lakeview.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Town of Lakeview

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.63%	12.74%	16.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(9.13%)	(9.13%)	(9.13%)	(9.13%)	(9.13%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**8.58%**	**6.69%**	**10.65%**	**1.31%**	**5.41%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**9.14%**	**7.25%**	**11.21%**	**1.79%**	**5.89%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.20%	3.61%	11.12%	1.86%	4.57%
July 1, 2013 to June 30, 2015	5.12%	1.99%	8.58%	0.00%	2.49%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Town of Lakeview

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,049,356	$1,342,373
Allocated pre-SLGRP pooled liability/(surplus)	(203,079)	(171,826)
Transition liability/(surplus)	(1,054,717)	(1,063,260)
Allocated pooled OPSRP UAL	72,237	14,368
Side account	0	0
Net unfunded pension actuarial accrued liability	(136,203)	121,655
Combined valuation payroll	1,024,893	842,061
Net pension UAL as a percentage of payroll	(13%)	14%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(9.13%)	(10.86%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$21,503	$21,814
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$124,819	$19,721	5.78%	$110,219	$6,371
Tier 2 General Service	10.58%	177,485	18,778	10.42%	156,180	16,274
Total General Service		**302,304**	**38,499**		**266,399**	**22,645**
Tier 1 Police & Fire	17.89%	126,412	22,615	15.06%	107,899	16,250
Tier 2 Police & Fire	15.70%	151,101	23,723	15.12%	132,176	19,985
Total Police & Fire		**277,513**	**46,338**		**240,075**	**36,235**
Total		**$579,817**	**$84,837**		**$506,474**	**$58,880**
Employer normal cost rate						
General Service			**12.74%**			**8.50%**
Police & Fire			**16.70%**			**15.09%**
Aggregate (Default)			**14.63%**			**11.63%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,063,260)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.75%)
B. Actual employer payroll	487,761
C. Payment to transition liability/(surplus)	(42,679)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.75%)
B. Actual employer payroll	502,755
C. Payment to transition liability/(surplus)	(43,991)
4. Supplemental payment to transition liability	0
5. Interest	(78,127)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,054,717)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,054,717)	(1,063,260)
2. Combined valuation payroll	1,024,893	842,061
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.13%)**	**(10.86%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,024,893	842,061
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Town of Canyon City/2255
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Town of Canyon City/2255

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Milliman

December 2013
Town of Canyon City/2255

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Town of Canyon City -- #2255

December 2013

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Executive Summary

Milliman has prepared this report for Town of Canyon City to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Town of Canyon City.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Town of Canyon City

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	2.17%	2.17%	2.17%	2.17%	2.17%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.05%**	**21.05%**	**21.97%**	**12.61%**	**16.71%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.61%**	**21.61%**	**22.53%**	**13.09%**	**17.19%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.35%	12.35%	21.91%	12.68%	15.39%
July 1, 2013 to June 30, 2015	12.39%	12.39%	21.70%	12.88%	15.61%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Town of Canyon City

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$138,884	$221,856
Allocated pre-SLGRP pooled liability/(surplus)	(26,878)	(28,398)
Transition liability/(surplus)	33,251	33,937
Allocated pooled OPSRP UAL	9,561	2,375
Side account	0	0
Net unfunded pension actuarial accrued liability	154,818	229,770
Combined valuation payroll	135,646	139,169
Net pension UAL as a percentage of payroll	114%	165%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	2.17%	2.10%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,846	$3,605
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$54,450	$8,603	5.78%	$94,287	$5,450
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**54,450**	**8,603**		**94,287**	**5,450**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$54,450**	**$8,603**		**$94,287**	**$5,450**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$33,937
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.07%
B. Actual employer payroll	87,255
C. Payment to transition liability/(surplus)	1,806
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.07%
B. Actual employer payroll	64,894
C. Payment to transition liability/(surplus)	1,343
4. Supplemental payment to transition liability	0
5. Interest	2,463
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$33,251**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	33,251	33,937
2. Combined valuation payroll	135,646	139,169
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.17%**	**2.10%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	135,646	139,169
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Tillamook Peoples Utility District/2626
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Tillamook Peoples Utility District/2626

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Tillamook Peoples Utility District/2626

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Tillamook Peoples Utility District -- #2626

December 2013

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Executive Summary

Milliman has prepared this report for Tillamook Peoples Utility District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Tillamook Peoples Utility District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Tillamook Peoples Utility District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.81%	13.81%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(0.21%)	(0.21%)	(0.21%)	(0.21%)	(0.21%)
Net pension contribution rate	**16.68%**	**16.68%**	**19.59%**	**10.23%**	**14.33%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.24%**	**17.24%**	**20.15%**	**10.71%**	**14.81%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.42%	11.42%	19.62%	10.39%	13.10%
July 1, 2013 to June 30, 2015	11.72%	11.72%	19.24%	10.42%	13.15%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Tillamook Peoples Utility District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$7,408,800	$11,001,662
Allocated pre-SLGRP pooled liability/(surplus)	(1,433,803)	(1,408,229)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	510,019	117,752
Side account	168,970	162,651
Net unfunded pension actuarial accrued liability	6,316,046	9,548,534
Combined valuation payroll	7,236,082	6,901,264
Net pension UAL as a percentage of payroll	87%	138%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	(0.21%)	(0.20%)
Allocated pooled RHIA UAL	$151,816	$178,781
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$2,546,134	$402,289	5.78%	$2,626,780	$151,828
Tier 2 General Service	10.58%	1,572,230	166,342	10.42%	1,650,606	171,993
Total General Service		**4,118,364**	**568,631**		**4,277,386**	**323,821**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$4,118,364**	**$568,631**		**$4,277,386**	**$323,821**
Employer normal cost rate						
General Service			**13.81%**			**7.57%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.81%**			**7.57%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	7,236,082	6,901,264
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$162,651**	**$162,651**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(15,473)	(15,473)
5. Side account earnings during 2012		22,792	22,792
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$168,970**	**$168,970**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$168,970	$162,651
Side Account 2	0	0
Side Account 3	0	0
Total	**$168,970**	**$162,651**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$168,970	$162,651
2. Combined valuation payroll	7,236,082	6,901,264
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(0.21%)	(0.20%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Tillamook Bay Community College/2997
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Tillamook Bay Community College/2997

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Tillamook Bay Community College/2997

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Tillamook Bay Community College -- #2997

December 2013

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Executive Summary

Milliman has prepared this report for Tillamook Bay Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Tillamook Bay Community College.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Tillamook Bay Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(7.59%)	(7.59%)	(7.59%)	(7.59%)	(7.59%)
Net pension contribution rate	**12.25%**	**12.25%**	**15.82%**	**6.46%**	**10.56%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.81%**	**12.81%**	**16.38%**	**6.94%**	**11.04%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.15%	7.15%	14.81%	5.58%	8.29%
July 1, 2013 to June 30, 2015	8.73%	8.73%	15.75%	6.93%	9.66%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Tillamook Bay Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,653,889	$2,503,843
Allocated pre-SLGRP pooled liability/(surplus)	336,781	340,295
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	113,853	26,799
Side account	1,381,330	1,334,123
Net unfunded pension actuarial accrued liability	723,193	1,536,814
Combined valuation payroll	1,615,333	1,570,643
Net pension UAL as a percentage of payroll	45%	98%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(7.59%)	(7.31%)
Allocated pooled RHIA UAL	$33,890	$40,688
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$1,334,123**	**$1,334,123**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(138,133)	(138,133)
5. Side account earnings during 2012		186,340	186,340
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$1,381,330**	**$1,381,330**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$1,381,330	$1,334,123
Side Account 2	0	0
Side Account 3	0	0
Total	**$1,381,330**	**$1,334,123**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$1,381,330	$1,334,123
2. Combined valuation payroll	1,615,333	1,570,643
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(7.59%)	(7.31%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

The Oregon Consortium/2652
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
The Oregon Consortium/2652

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
The Oregon Consortium/2652

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

The Oregon Consortium -- #2652

December 2013

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Executive Summary

Milliman has prepared this report for The Oregon Consortium to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to The Oregon Consortium.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for The Oregon Consortium

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	3.97%	3.97%	3.97%	3.97%	3.97%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**24.61%**	**24.61%**	**25.53%**	**16.17%**	**20.27%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**25.17%**	**25.17%**	**26.09%**	**16.65%**	**20.75%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.53%	14.53%	23.09%	13.86%	16.57%
July 1, 2013 to June 30, 2015	15.71%	15.71%	23.51%	14.69%	17.42%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

The Oregon Consortium

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$194,315	$485,618
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	84,914	81,869
Allocated pooled OPSRP UAL	13,377	5,198
Side account	0	0
Net unfunded pension actuarial accrued liability	292,606	572,685
Combined valuation payroll	189,785	304,625
Net pension UAL as a percentage of payroll	154%	188%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	3.97%	2.31%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,982	$7,891
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$92,317	$14,586	5.78%	$173,437	$10,025
Tier 2 General Service	10.58%	0	0	10.42%	83,317	8,682
Total General Service		**92,317**	**14,586**		**256,754**	**18,707**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$92,317**	**$14,586**		**$256,754**	**$18,707**
Employer normal cost rate						
General Service			**15.80%**			**7.29%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**7.29%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$81,869
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.55%
B. Actual employer payroll	119,164
C. Payment to transition liability/(surplus)	1,847
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.55%
B. Actual employer payroll	90,177
C. Payment to transition liability/(surplus)	1,398
4. Supplemental payment to transition liability	0
5. Interest	6,290
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$84,914**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	84,914	81,869
2. Combined valuation payroll	189,785	304,625
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**3.97%**	**2.31%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	189,785	304,625
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

The Job Council/2814
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
The Job Council/2814

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
The Job Council/2814

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

The Job Council -- #2814

December 2013

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Executive Summary

Milliman has prepared this report for The Job Council to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to The Job Council.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for The Job Council

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.45%	12.45%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	23.04%	23.04%	23.04%	23.04%	23.04%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**38.57%**	**38.57%**	**42.84%**	**33.48%**	**37.58%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**39.13%**	**39.13%**	**43.40%**	**33.96%**	**38.06%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	25.44%	25.44%	32.84%	23.61%	26.32%
July 1, 2013 to June 30, 2015	33.62%	33.62%	40.22%	31.40%	34.13%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

The Job Council

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,861,576	$3,033,363
Allocated pre-SLGRP pooled liability/(surplus)	(360,265)	(388,275)
Transition liability/(surplus)	4,722,778	4,597,331
Allocated pooled OPSRP UAL	128,150	32,466
Side account	0	0
Net unfunded pension actuarial accrued liability	6,352,239	7,274,885
Combined valuation payroll	1,818,178	1,902,807
Net pension UAL as a percentage of payroll	349%	382%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	23.04%	20.78%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$38,146	$49,293
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$389,375	$61,521	5.78%	$528,174	$30,528
Tier 2 General Service	10.58%	698,624	73,914	10.42%	743,445	77,467
Total General Service		**1,087,999**	**135,435**		**1,271,619**	**107,995**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$1,087,999**	**$135,435**		**$1,271,619**	**$107,995**
Employer normal cost rate						
General Service			**12.45%**			**8.49%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.45%**			**8.49%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$4,597,331
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	13.00%
B. Actual employer payroll	849,801
C. Payment to transition liability/(surplus)	110,474
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	13.00%
B. Actual employer payroll	876,258
C. Payment to transition liability/(surplus)	113,914
4. Supplemental payment to transition liability	0
5. Interest	349,835
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$4,722,778**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	4,722,778	4,597,331
2. Combined valuation payroll	1,818,178	1,902,807
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**23.04%**	**20.78%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,818,178	1,902,807
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Talent Irrigation District/2582
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Talent Irrigation District/2582

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Talent Irrigation District/2582

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Talent Irrigation District -- #2582

December 2013

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Executive Summary

Milliman has prepared this report for Talent Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Talent Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Talent Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.81%	14.81%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.13%	1.13%	1.13%	1.13%	1.13%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.02%**	**19.02%**	**20.93%**	**11.57%**	**15.67%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.58%**	**19.58%**	**21.49%**	**12.05%**	**16.15%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.46%	12.46%	20.92%	11.69%	14.40%
July 1, 2013 to June 30, 2015	12.74%	12.74%	21.17%	12.35%	15.08%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Talent Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$575,974	$737,313
Allocated pre-SLGRP pooled liability/(surplus)	(111,467)	(94,377)
Transition liability/(surplus)	71,583	72,601
Allocated pooled OPSRP UAL	39,650	7,892
Side account	0	0
Net unfunded pension actuarial accrued liability	575,740	723,429
Combined valuation payroll	562,547	462,511
Net pension UAL as a percentage of payroll	102%	156%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.13%	1.35%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$11,802	$11,982
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$357,160	$56,431	5.78%	$349,386	$20,195
Tier 2 General Service	10.58%	83,760	8,862	10.42%	81,752	8,519
Total General Service		**440,920**	**65,293**		**431,138**	**28,714**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$440,920**	**$65,293**		**$431,138**	**$28,714**
Employer normal cost rate						
General Service			**14.81%**			**6.66%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.81%**			**6.66%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$72,601
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	1.08%
B. Actual employer payroll	285,066
C. Payment to transition liability/(surplus)	3,079
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	1.08%
B. Actual employer payroll	300,149
C. Payment to transition liability/(surplus)	3,241
4. Supplemental payment to transition liability	0
5. Interest	5,302
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$71,583**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	71,583	72,601
2. Combined valuation payroll	562,547	462,511
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.13%**	**1.35%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	562,547	462,511
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Sweet Home Fire and Ambulance District/2847
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Sweet Home Fire and Ambulance District/2847

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Sweet Home Fire and Ambulance District/2847

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Sweet Home Fire and Ambulance District -- #2847

December 2013

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Executive Summary

Milliman has prepared this report for Sweet Home Fire and Ambulance District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Sweet Home Fire and Ambulance District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Sweet Home Fire and Ambulance District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.07%	15.80%	17.21%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.88%)	(0.88%)	(0.88%)	(0.88%)	(0.88%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.27%**	**18.00%**	**19.41%**	**9.56%**	**13.66%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.83%**	**18.56%**	**19.97%**	**10.04%**	**14.14%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.24%	9.35%	19.11%	9.68%	12.39%
July 1, 2013 to June 30, 2015	18.23%	9.88%	19.18%	10.37%	13.10%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Sweet Home Fire and Ambulance District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$934,089	$1,323,720
Allocated pre-SLGRP pooled liability/(surplus)	(180,771)	(169,438)
Transition liability/(surplus)	(90,683)	(91,937)
Allocated pooled OPSRP UAL	64,302	14,168
Side account	0	0
Net unfunded pension actuarial accrued liability	726,937	1,076,513
Combined valuation payroll	912,313	830,360
Net pension UAL as a percentage of payroll	80%	130%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.88%)	(0.95%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,141	$21,511
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$55,173	$8,717	5.78%	$53,854	$3,113
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**55,173**	**8,717**		**53,854**	**3,113**
Tier 1 Police & Fire	17.89%	337,398	60,361	15.06%	323,611	48,736
Tier 2 Police & Fire	15.70%	150,654	23,653	15.12%	149,467	22,599
Total Police & Fire		**488,052**	**84,014**		**473,078**	**71,335**
Total		**$543,225**	**$92,731**		**$526,932**	**$74,448**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**17.21%**			**15.08%**
Aggregate (Default)			**17.07%**			**14.13%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($91,937)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.93%)
B. Actual employer payroll	419,242
C. Payment to transition liability/(surplus)	(3,899)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.93%)
B. Actual employer payroll	437,807
C. Payment to transition liability/(surplus)	(4,072)
4. Supplemental payment to transition liability	0
5. Interest	(6,717)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($90,683)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(90,683)	(91,937)
2. Combined valuation payroll	912,313	830,360
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.88%)**	**(0.95%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	912,313	830,360
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

December 2013

Sutherlin Water Control District/2810
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Sutherlin Water Control District/2810

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Sutherlin Water Control District/2810

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Sutherlin Water Control District -- #2810

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Sutherlin Water Control District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Sutherlin Water Control District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Sutherlin Water Control District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.61%)	(1.61%)	(1.61%)	(1.61%)	(1.61%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.40%**	**14.81%**	**18.19%**	**8.83%**	**12.93%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.96%**	**15.37%**	**18.75%**	**9.31%**	**13.41%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.77%	10.46%	18.24%	9.01%	11.72%
July 1, 2013 to June 30, 2015	11.86%	10.63%	17.80%	8.98%	11.71%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Sutherlin Water Control District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$52,840	$79,056
Allocated pre-SLGRP pooled liability/(surplus)	(10,226)	(10,119)
Transition liability/(surplus)	(9,375)	(9,467)
Allocated pooled OPSRP UAL	3,637	846
Side account	0	0
Net unfunded pension actuarial accrued liability	36,876	60,316
Combined valuation payroll	51,608	49,591
Net pension UAL as a percentage of payroll	71%	122%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.61%)	(1.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,083	$1,285
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($9,467)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.60%)
B. Actual employer payroll	24,089
C. Payment to transition liability/(surplus)	(385)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.60%)
B. Actual employer payroll	25,029
C. Payment to transition liability/(surplus)	(401)
4. Supplemental payment to transition liability	0
5. Interest	(694)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($9,375)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(9,375)	(9,467)
2. Combined valuation payroll	51,608	49,591
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.61%)**	**(1.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	51,608	49,591
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Sunriver Service District/2857
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Sunriver Service District/2857

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Sunriver Service District/2857

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Sunriver Service District -- #2857

December 2013

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Executive Summary

Milliman has prepared this report for Sunriver Service District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Sunriver Service District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Sunriver Service District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.60%	10.58%	16.02%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(6.79%)	(6.79%)	(6.79%)	(6.79%)	(6.79%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.65%**	**8.63%**	**14.07%**	**5.41%**	**9.51%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.21%**	**9.19%**	**14.63%**	**5.89%**	**9.99%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.88%	9.08%	14.24%	5.32%	8.03%
July 1, 2013 to June 30, 2015	14.44%	10.08%	14.77%	5.93%	8.66%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Sunriver Service District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,071,943	$3,345,122
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(1,548,711)	(1,585,412)
Allocated pooled OPSRP UAL	142,632	35,803
Side account	0	0
Net unfunded pension actuarial accrued liability	665,864	1,795,513
Combined valuation payroll	2,023,641	2,098,371
Net pension UAL as a percentage of payroll	33%	86%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(6.79%)	(6.50%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$42,457	$54,359
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	120,536	12,753	10.42%	117,839	12,279
Total General Service		**120,536**	**12,753**		**117,839**	**12,279**
Tier 1 Police & Fire	17.89%	212,229	37,968	15.06%	204,074	30,734
Tier 2 Police & Fire	15.70%	1,247,655	195,882	15.12%	1,364,100	206,252
Total Police & Fire		**1,459,884**	**233,850**		**1,568,174**	**236,986**
Total		**$1,580,420**	**$246,603**		**$1,686,013**	**$249,265**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.02%**			**15.11%**
Aggregate (Default)			**15.60%**			**14.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($1,585,412)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.99%)
B. Actual employer payroll	1,025,980
C. Payment to transition liability/(surplus)	(71,716)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.99%)
B. Actual employer payroll	1,140,254
C. Payment to transition liability/(surplus)	(79,704)
4. Supplemental payment to transition liability	0
5. Interest	(114,719)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($1,548,711)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(1,548,711)	(1,585,412)
2. Combined valuation payroll	2,023,641	2,098,371
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.79%)**	**(6.50%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,023,641	2,098,371
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Suburban East Salem Water District/2641
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Suburban East Salem Water District/2641

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Suburban East Salem Water District/2641

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Suburban East Salem Water District -- #2641

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Suburban East Salem Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Suburban East Salem Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Suburban East Salem Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.28%	14.28%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.75%)	(1.75%)	(1.75%)	(1.75%)	(1.75%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.37%**	**17.37%**	**19.81%**	**10.45%**	**14.55%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.93%**	**17.93%**	**20.37%**	**10.93%**	**15.03%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.22%	11.22%	19.51%	10.28%	12.99%
July 1, 2013 to June 30, 2015	11.24%	11.24%	19.10%	10.28%	13.01%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Suburban East Salem Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$398,053	$513,251
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(76,584)	(78,485)
Allocated pooled OPSRP UAL	27,402	5,493
Side account	0	0
Net unfunded pension actuarial accrued liability	348,871	440,259
Combined valuation payroll	388,773	321,959
Net pension UAL as a percentage of payroll	90%	137%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.75%)	(2.10%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,157	$8,341
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$215,113	$33,988	5.78%	$190,471	$11,009
Tier 2 General Service	10.58%	88,590	9,373	10.42%	86,587	9,022
Total General Service		**303,703**	**43,361**		**277,058**	**20,031**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$303,703**	**$43,361**		**$277,058**	**$20,031**
Employer normal cost rate						
General Service			**14.28%**			**7.23%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.28%**			**7.23%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($78,485)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.03%)
B. Actual employer payroll	169,459
C. Payment to transition liability/(surplus)	(3,440)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.03%)
B. Actual employer payroll	203,631
C. Payment to transition liability/(surplus)	(4,134)
4. Supplemental payment to transition liability	0
5. Interest	(5,673)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($76,584)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(76,584)	(78,485)
2. Combined valuation payroll	388,773	321,959
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.75%)**	**(2.10%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	388,773	321,959
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Sublimity Fire District/2799
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Sublimity Fire District/2799

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Sublimity Fire District/2799

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Sublimity Fire District -- #2799

December 2013

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Executive Summary

Milliman has prepared this report for Sublimity Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Sublimity Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Sublimity Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.11%	10.58%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.78%)	(5.78%)	(5.78%)	(5.78%)	(5.78%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.17%**	**9.64%**	**14.76%**	**6.42%**	**10.52%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.73%**	**10.20%**	**15.32%**	**6.90%**	**11.00%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.21%	9.13%	14.18%	5.37%	8.08%
July 1, 2013 to June 30, 2015	13.52%	10.31%	15.01%	6.16%	8.89%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Sublimity Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$171,241	$246,489
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(108,959)	(111,846)
Allocated pooled OPSRP UAL	11,788	2,638
Side account	0	0
Net unfunded pension actuarial accrued liability	74,070	137,281
Combined valuation payroll	167,249	154,621
Net pension UAL as a percentage of payroll	44%	89%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.78%)	(6.22%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,509	$4,006
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	33,882	3,585	10.42%	33,943	3,537
Total General Service		**33,882**	**3,585**		**33,943**	**3,537**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	75,243	11,813	15.12%	73,086	11,051
Total Police & Fire		**75,243**	**11,813**		**73,086**	**11,051**
Total		**$109,125**	**$15,398**		**$107,029**	**$14,588**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**14.11%**			**13.63%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($111,846)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.94%)
B. Actual employer payroll	78,692
C. Payment to transition liability/(surplus)	(5,461)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.94%)
B. Actual employer payroll	79,211
C. Payment to transition liability/(surplus)	(5,497)
4. Supplemental payment to transition liability	0
5. Interest	(8,071)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($108,959)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(108,959)	(111,846)
2. Combined valuation payroll	167,249	154,621
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.78%)**	**(6.22%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	167,249	154,621
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Stayton Fire District/2696
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Stayton Fire District/2696

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Stayton Fire District/2696

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Stayton Fire District -- #2696

December 2013

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Executive Summary

Milliman has prepared this report for Stayton Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Stayton Fire District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Stayton Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.21%	10.58%	16.21%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.63%)	(1.63%)	(1.63%)	(1.63%)	(1.63%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.42%**	**13.79%**	**19.42%**	**10.57%**	**14.67%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.98%**	**14.35%**	**19.98%**	**11.05%**	**15.15%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.02%	13.48%	18.84%	9.72%	12.43%
July 1, 2013 to June 30, 2015	18.81%	14.95%	19.64%	10.80%	13.53%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Stayton Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$451,626	$627,667
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(80,938)	(85,764)
Allocated pooled OPSRP UAL	31,090	6,718
Side account	0	0
Net unfunded pension actuarial accrued liability	401,778	548,621
Combined valuation payroll	441,097	393,731
Net pension UAL as a percentage of payroll	91%	139%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.63%)	(1.87%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,254	$10,200
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	52,733	5,579	10.42%	52,231	5,442
Total General Service		**52,733**	**5,579**		**52,231**	**5,442**
Tier 1 Police & Fire	17.89%	57,134	10,221	15.06%	53,793	8,101
Tier 2 Police & Fire	15.70%	186,845	29,335	15.12%	190,443	28,795
Total Police & Fire		**243,979**	**39,556**		**244,236**	**36,896**
Total		**$296,712**	**$45,135**		**$296,467**	**$42,338**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.21%**			**15.11%**
Aggregate (Default)			**15.21%**			**14.28%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($85,764)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.59%)
B. Actual employer payroll	206,884
C. Payment to transition liability/(surplus)	(5,358)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.59%)
B. Actual employer payroll	210,917
C. Payment to transition liability/(surplus)	(5,463)
4. Supplemental payment to transition liability	0
5. Interest	(5,995)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($80,938)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(80,938)	(85,764)
2. Combined valuation payroll	441,097	393,731
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.63%)**	**(1.87%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	441,097	393,731
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

State Agencies/1000
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
State Agencies/1000

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
State Agencies/1000

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

State Agencies -- #1000

December 2013

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Executive Summary

Milliman has prepared this report for State Agencies to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to State Agencies.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for State Agencies

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.96%	13.46%	16.66%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(7.21%)	(7.21%)	(7.21%)	(7.21%)	(7.21%)
Net pension contribution rate	**13.44%**	**12.94%**	**16.14%**	**6.84%**	**10.94%**
Retiree Healthcare					
Normal cost rate	0.17%	0.17%	0.17%	0.00%	0.00%
UAL rate	0.82%	0.82%	0.82%	0.82%	0.82%
Net retiree healthcare rate	**0.99%**	**0.99%**	**0.99%**	**0.82%**	**0.82%**
Total net employer contribution rate	**14.43%**	**13.93%**	**17.13%**	**7.66%**	**11.76%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.98%	8.80%	16.65%	7.44%	10.15%
July 1, 2013 to June 30, 2015	10.10%	9.00%	16.27%	7.45%	10.18%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.16%	0.11%	0.11%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.27%	0.20%	0.20%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

State Agencies

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,469,131,170	$3,762,600,450
Allocated pre-SLGRP pooled liability/(surplus)	502,789,129	511,371,324
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	169,974,052	40,271,507
Side account	1,960,377,326	1,862,380,958
Net unfunded pension actuarial accrued liability	1,181,517,025	2,451,862,323
Combined valuation payroll	2,411,569,454	2,360,252,440
Net pension UAL as a percentage of payroll	49%	104%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(7.21%)	(6.79%)
Allocated pooled RHIA UAL	$50,595,752	$61,143,528
Allocated pooled RHIPA UAL	$55,400,345	$29,679,899

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$679,878,893	$107,420,865	5.78%	$724,348,654	$41,867,352
Tier 2 General Service	10.58%	551,998,828	58,401,476	10.42%	568,833,439	59,272,444
Total General Service		**1,231,877,721**	**165,822,341**		**1,293,182,093**	**101,139,796**
Tier 1 Police & Fire	17.89%	98,707,869	17,658,838	15.06%	103,753,323	15,625,250
Tier 2 Police & Fire	15.70%	126,994,525	19,938,140	15.12%	125,893,148	19,035,044
Total Police & Fire		**225,702,394**	**37,596,978**		**229,646,471**	**34,660,294**
Total		**$1,457,580,115**	**$203,419,319**		**$1,522,828,564**	**$135,800,090**
Employer normal cost rate						
General Service			**13.46%**			**7.82%**
Police & Fire			**16.66%**			**15.09%**
Aggregate (Default)			**13.96%**			**8.92%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	2,411,569,454	2,360,252,440
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$1,862,380,958**	**$1,862,380,958**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(164,068,164)	(164,068,164)
5. Side account earnings during 2012		262,065,531	262,065,531
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$1,960,377,326**	**$1,960,377,326**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$1,960,377,326	$1,862,380,958
Side Account 2	0	0
Side Account 3	0	0
Total	**$1,960,377,326**	**$1,862,380,958**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$1,960,377,326	$1,862,380,958
2. Combined valuation payroll	2,411,569,454	2,360,252,440
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(7.21%)	(6.79%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Stanfield Fire District/2706
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Stanfield Fire District/2706

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Stanfield Fire District/2706

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Stanfield Fire District -- #2706

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Stanfield Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Stanfield Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Stanfield Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(5.10%)	(5.10%)	(5.10%)	(5.10%)	(5.10%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.87%**	**11.32%**	**15.87%**	**5.34%**	**9.44%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.43%**	**11.88%**	**16.43%**	**5.82%**	**9.92%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.30%	7.10%	15.30%	5.65%	8.36%
July 1, 2013 to June 30, 2015	15.48%	8.34%	15.48%	6.69%	9.42%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Stanfield Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$88,554	$143,630
Allocated pre-SLGRP pooled liability/(surplus)	(17,138)	(18,385)
Transition liability/(surplus)	(49,710)	(50,140)
Allocated pooled OPSRP UAL	6,096	1,537
Side account	0	0
Net unfunded pension actuarial accrued liability	27,802	76,642
Combined valuation payroll	86,490	90,098
Net pension UAL as a percentage of payroll	32%	85%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(5.10%)	(4.79%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,815	$2,334
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	86,490	15,473	15.06%	90,098	13,569
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**86,490**	**15,473**		**90,098**	**13,569**
Total		**$86,490**	**$15,473**		**$90,098**	**$13,569**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($50,140)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.96%)
B. Actual employer payroll	42,250
C. Payment to transition liability/(surplus)	(2,096)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.96%)
B. Actual employer payroll	40,650
C. Payment to transition liability/(surplus)	(2,016)
4. Supplemental payment to transition liability	0
5. Interest	(3,682)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($49,710)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(49,710)	(50,140)
2. Combined valuation payroll	86,490	90,098
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.10%)**	**(4.79%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	86,490	90,098
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Southwestern Community College/2998
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Southwestern Community College/2998

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Southwestern Community College/2998

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Southwestern Community College -- #2998

December 2013

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Executive Summary

Milliman has prepared this report for Southwestern Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Southwestern Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Southwestern Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(9.75%)	(9.75%)	(9.75%)	(9.75%)	(9.75%)
Net pension contribution rate	**10.09%**	**10.09%**	**13.66%**	**4.30%**	**8.40%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.65%**	**10.65%**	**14.22%**	**4.78%**	**8.88%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.86%	6.86%	14.52%	5.29%	8.00%
July 1, 2013 to June 30, 2015	6.55%	6.55%	13.57%	4.75%	7.48%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Southwestern Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$10,632,788	$15,697,521
Allocated pre-SLGRP pooled liability/(surplus)	2,165,154	2,133,435
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	731,957	168,012
Side account	11,409,354	10,865,153
Net unfunded pension actuarial accrued liability	2,120,545	7,133,815
Combined valuation payroll	10,384,911	9,846,943
Net pension UAL as a percentage of payroll	20%	72%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(9.75%)	(9.49%)
Allocated pooled RHIA UAL	$217,880	$255,090
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$10,865,153**	**$10,865,153**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(985,867)	(985,867)
5. Side account earnings during 2012		1,531,067	1,531,067
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$11,409,354**	**$11,409,354**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$11,409,354	$10,865,153
Side Account 2	0	0
Side Account 3	0	0
Total	**$11,409,354**	**$10,865,153**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$11,409,354	$10,865,153
2. Combined valuation payroll	10,384,911	9,846,943
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(9.75%)	(9.49%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Southwest Lincoln County Water District/2766
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Southwest Lincoln County Water District/2766

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Southwest Lincoln County Water District/2766

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Southwest Lincoln County Water District -- #2766

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Southwest Lincoln County Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Southwest Lincoln County Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Southwest Lincoln County Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.72%	11.72%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.25%)	(1.25%)	(1.25%)	(1.25%)	(1.25%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.55%**	**13.55%**	**18.55%**	**9.19%**	**13.29%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.11%**	**14.11%**	**19.11%**	**9.67%**	**13.77%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.14%	12.14%	18.52%	9.29%	12.00%
July 1, 2013 to June 30, 2015	12.51%	12.51%	18.19%	9.37%	12.10%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Southwest Lincoln County Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$284,346	$435,867
Allocated pre-SLGRP pooled liability/(surplus)	(55,029)	(55,792)
Transition liability/(surplus)	(39,065)	(39,673)
Allocated pooled OPSRP UAL	19,574	4,665
Side account	0	0
Net unfunded pension actuarial accrued liability	209,826	345,067
Combined valuation payroll	277,717	273,416
Net pension UAL as a percentage of payroll	76%	126%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.25%)	(1.25%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,827	$7,083
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$52,742	$8,333	5.78%	$51,819	$2,995
Tier 2 General Service	10.58%	189,800	20,081	10.42%	187,277	19,514
Total General Service		**242,542**	**28,414**		**239,096**	**22,509**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$242,542**	**$28,414**		**$239,096**	**$22,509**
Employer normal cost rate						
General Service			**11.72%**			**9.41%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.72%**			**9.41%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($39,673)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.32%)
B. Actual employer payroll	130,483
C. Payment to transition liability/(surplus)	(1,722)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.32%)
B. Actual employer payroll	134,808
C. Payment to transition liability/(surplus)	(1,780)
4. Supplemental payment to transition liability	0
5. Interest	(2,894)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($39,065)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(39,065)	(39,673)
2. Combined valuation payroll	277,717	273,416
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.25%)**	**(1.25%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	277,717	273,416
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

South Suburban Sanitary District/2599
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
South Suburban Sanitary District/2599

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
South Suburban Sanitary District/2599

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

South Suburban Sanitary District -- #2599

December 2013

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Executive Summary

Milliman has prepared this report for South Suburban Sanitary District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to South Suburban Sanitary District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for South Suburban Sanitary District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.11%	14.11%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.87%)	(1.87%)	(1.87%)	(1.87%)	(1.87%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.08%**	**17.08%**	**19.69%**	**10.33%**	**14.43%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.64%**	**17.64%**	**20.25%**	**10.81%**	**14.91%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.37%	11.37%	19.66%	10.43%	13.14%
July 1, 2013 to June 30, 2015	11.17%	11.17%	18.98%	10.16%	12.89%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

South Suburban Sanitary District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$731,887	$941,390
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(151,033)	(152,627)
Allocated pooled OPSRP UAL	50,383	10,076
Side account	0	0
Net unfunded pension actuarial accrued liability	631,237	798,839
Combined valuation payroll	714,825	590,527
Net pension UAL as a percentage of payroll	88%	135%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.87%)	(2.22%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$14,997	$15,298
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$234,548	$37,059	5.78%	$225,777	$13,050
Tier 2 General Service	10.58%	112,234	11,874	10.42%	107,357	11,187
Total General Service		**346,782**	**48,933**		**333,134**	**24,237**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$346,782**	**$48,933**		**$333,134**	**$24,237**
Employer normal cost rate						
General Service			**14.11%**			**7.28%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.11%**			**7.28%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($152,627)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.88%)
B. Actual employer payroll	334,902
C. Payment to transition liability/(surplus)	(6,296)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.88%)
B. Actual employer payroll	344,992
C. Payment to transition liability/(surplus)	(6,486)
4. Supplemental payment to transition liability	0
5. Interest	(11,188)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($151,033)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(151,033)	(152,627)
2. Combined valuation payroll	714,825	590,527
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.87%)**	**(2.22%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	714,825	590,527
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Siuslaw Rural Fire Protection District #1/2794
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Siuslaw Rural Fire Protection District #1/2794

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Siuslaw Rural Fire Protection District #1/2794

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

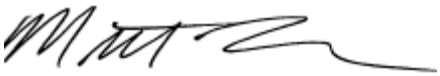
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

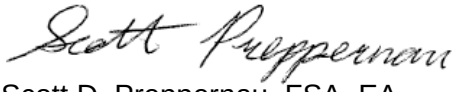
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Siuslaw Rural Fire Protection District #1 -- #2794

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Siuslaw Rural Fire Protection District #1 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Siuslaw Rural Fire Protection District #1.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Siuslaw Rural Fire Protection District #1

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.05%	10.62%	17.33%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(0.84%)	(0.84%)	(0.84%)	(0.84%)	(0.84%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.05%**	**14.62%**	**21.33%**	**11.36%**	**15.46%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.61%**	**15.18%**	**21.89%**	**11.84%**	**15.94%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.55%	11.98%	17.58%	8.22%	10.93%
July 1, 2013 to June 30, 2015	18.16%	15.16%	19.82%	11.01%	13.74%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Siuslaw Rural Fire Protection District #1

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$465,668	$556,995
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(43,074)	(63,012)
Allocated pooled OPSRP UAL	32,056	5,962
Side account	0	0
Net unfunded pension actuarial accrued liability	454,650	499,945
Combined valuation payroll	454,812	349,399
Net pension UAL as a percentage of payroll	100%	143%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(0.84%)	(1.55%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,542	$9,051
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$524	$83	5.78%	$0	$0
Tier 2 General Service	10.58%	61,212	6,476	10.42%	94,670	9,865
Total General Service		**61,736**	**6,559**		**94,670**	**9,865**
Tier 1 Police & Fire	17.89%	195,049	34,894	15.06%	115,850	17,447
Tier 2 Police & Fire	15.70%	67,077	10,531	15.12%	55,789	8,435
Total Police & Fire		**262,126**	**45,425**		**171,639**	**25,882**
Total		**$323,862**	**$51,984**		**$266,309**	**$35,747**
Employer normal cost rate						
General Service			**10.62%**			**10.42%**
Police & Fire			**17.33%**			**15.08%**
Aggregate (Default)			**16.05%**			**13.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($63,012)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.09%)
B. Actual employer payroll	269,950
C. Payment to transition liability/(surplus)	(11,041)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.09%)
B. Actual employer payroll	295,551
C. Payment to transition liability/(surplus)	(12,088)
4. Supplemental payment to transition liability	0
5. Interest	(3,191)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($43,074)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(43,074)	(63,012)
2. Combined valuation payroll	454,812	349,399
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.84%)**	**(1.55%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	454,812	349,399
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Siuslaw Public Library/2692
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
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In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Siuslaw Public Library/2692

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

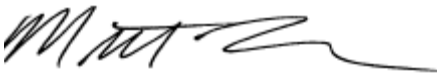
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

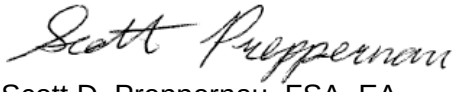
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Siuslaw Public Library -- #2692

December 2013

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Executive Summary

Milliman has prepared this report for Siuslaw Public Library to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Siuslaw Public Library.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Siuslaw Public Library

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.83%	11.83%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.97%)	(1.97%)	(1.97%)	(1.97%)	(1.97%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.94%**	**12.94%**	**17.83%**	**8.47%**	**12.57%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.50%**	**13.50%**	**18.39%**	**8.95%**	**13.05%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.42%	11.42%	17.86%	8.63%	11.34%
July 1, 2013 to June 30, 2015	11.68%	11.68%	17.46%	8.64%	11.37%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

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	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$390,772	$594,470
Allocated pre-SLGRP pooled liability/(surplus)	(75,625)	(76,093)
Transition liability/(surplus)	(84,651)	(85,913)
Allocated pooled OPSRP UAL	26,901	6,363
Side account	0	0
Net unfunded pension actuarial accrued liability	257,397	438,827
Combined valuation payroll	381,662	372,907
Net pension UAL as a percentage of payroll	67%	118%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.97%)	(1.98%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,007	$9,660
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$81,901	$12,940	5.78%	$80,088	$4,629
Tier 2 General Service	10.58%	261,137	27,628	10.42%	256,150	26,691
Total General Service		**343,038**	**40,568**		**336,238**	**31,320**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$343,038**	**$40,568**		**$336,238**	**$31,320**
Employer normal cost rate						
General Service			**11.83%**			**9.31%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.83%**			**9.31%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($85,913)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.98%)
B. Actual employer payroll	188,201
C. Payment to transition liability/(surplus)	(3,726)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.98%)
B. Actual employer payroll	192,227
C. Payment to transition liability/(surplus)	(3,806)
4. Supplemental payment to transition liability	0
5. Interest	(6,270)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($84,651)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(84,651)	(85,913)
2. Combined valuation payroll	381,662	372,907
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.97%)**	**(1.98%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	381,662	372,907
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Silverton Fire District/2659
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Silverton Fire District/2659

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Silverton Fire District/2659

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Silverton Fire District -- #2659

December 2013

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Executive Summary

Milliman has prepared this report for Silverton Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Silverton Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Silverton Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.80%	15.80%	16.95%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.55%)	(2.55%)	(2.55%)	(2.55%)	(2.55%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.33%**	**16.33%**	**17.48%**	**7.89%**	**11.99%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.89%**	**16.89%**	**18.04%**	**8.37%**	**12.47%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.52%	7.33%	16.99%	7.66%	10.37%
July 1, 2013 to June 30, 2015	15.72%	7.75%	17.05%	8.24%	10.97%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Silverton Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$414,459	$590,080
Allocated pre-SLGRP pooled liability/(surplus)	(80,209)	(75,531)
Transition liability/(surplus)	(116,151)	(118,978)
Allocated pooled OPSRP UAL	28,531	6,316
Side account	0	0
Net unfunded pension actuarial accrued liability	246,630	401,887
Combined valuation payroll	404,797	370,153
Net pension UAL as a percentage of payroll	61%	109%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.55%)	(2.76%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,493	$9,589
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$53,816	$8,503	5.78%	$53,175	$3,074
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**53,816**	**8,503**		**53,175**	**3,074**
Tier 1 Police & Fire	17.89%	199,968	35,774	15.06%	193,849	29,194
Tier 2 Police & Fire	15.70%	151,013	23,709	15.12%	123,129	18,617
Total Police & Fire		**350,981**	**59,483**		**316,978**	**47,811**
Total		**$404,797**	**$67,986**		**$370,153**	**$50,885**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.95%**			**15.08%**
Aggregate (Default)			**16.80%**			**13.75%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($118,978)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.95%)
B. Actual employer payroll	191,560
C. Payment to transition liability/(surplus)	(5,651)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.95%)
B. Actual employer payroll	195,942
C. Payment to transition liability/(surplus)	(5,780)
4. Supplemental payment to transition liability	0
5. Interest	(8,604)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($116,151)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(116,151)	(118,978)
2. Combined valuation payroll	404,797	370,153
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.55%)**	**(2.76%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	404,797	370,153
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Silver Falls Library District/2790
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Silver Falls Library District/2790

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Silver Falls Library District/2790

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Silver Falls Library District -- #2790

December 2013

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Executive Summary

Milliman has prepared this report for Silver Falls Library District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Silver Falls Library District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Silver Falls Library District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.21%	12.21%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.34%)	(2.34%)	(2.34%)	(2.34%)	(2.34%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.71%**	**14.71%**	**19.22%**	**9.86%**	**13.96%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.27%**	**15.27%**	**19.78%**	**10.34%**	**14.44%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.96%	11.96%	18.77%	9.54%	12.25%
July 1, 2013 to June 30, 2015	12.48%	12.48%	18.52%	9.70%	12.43%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Silver Falls Library District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$398,099	$540,282
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(102,408)	(105,681)
Allocated pooled OPSRP UAL	27,405	5,783
Side account	0	0
Net unfunded pension actuarial accrued liability	323,096	440,384
Combined valuation payroll	388,818	338,915
Net pension UAL as a percentage of payroll	83%	130%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.34%)	(2.68%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,158	$8,780
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$60,950	$9,630	5.78%	$52,905	$3,058
Tier 2 General Service	10.58%	134,608	14,242	10.42%	126,673	13,199
Total General Service		**195,558**	**23,872**		**179,578**	**16,257**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$195,558**	**$23,872**		**$179,578**	**$16,257**
Employer normal cost rate						
General Service			**12.21%**			**9.05%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.21%**			**9.05%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($105,681)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.77%)
B. Actual employer payroll	190,945
C. Payment to transition liability/(surplus)	(5,289)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.77%)
B. Actual employer payroll	201,075
C. Payment to transition liability/(surplus)	(5,570)
4. Supplemental payment to transition liability	0
5. Interest	(7,586)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($102,408)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(102,408)	(105,681)
2. Combined valuation payroll	388,818	338,915
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.34%)**	**(2.68%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	388,818	338,915
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Sherman County/2016
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Sherman County/2016

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
Sherman County/2016

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Sherman County -- #2016

December 2013

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Executive Summary

Milliman has prepared this report for Sherman County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Sherman County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Sherman County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.74%	13.03%	16.75%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	1.62%	1.62%	1.62%	1.62%	1.62%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.44%**	**17.73%**	**21.45%**	**12.06%**	**16.16%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.00%**	**18.29%**	**22.01%**	**12.54%**	**16.64%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.92%	14.71%	21.69%	12.68%	15.39%
July 1, 2013 to June 30, 2015	15.87%	14.68%	21.14%	12.32%	15.05%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Sherman County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,305,873	$3,482,523
Allocated pre-SLGRP pooled liability/(surplus)	(446,249)	(445,768)
Transition liability/(surplus)	412,322	432,383
Allocated pooled OPSRP UAL	158,735	37,274
Side account	0	0
Net unfunded pension actuarial accrued liability	2,430,681	3,506,412
Combined valuation payroll	2,252,117	2,184,562
Net pension UAL as a percentage of payroll	108%	161%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	1.62%	1.70%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$47,250	$56,592
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$534,320	$84,423	5.78%	$447,619	$25,872
Tier 2 General Service	10.58%	606,129	64,128	10.42%	711,416	74,130
Total General Service		**1,140,449**	**148,551**		**1,159,035**	**100,002**
Tier 1 Police & Fire	17.89%	130,934	23,424	15.06%	126,080	18,988
Tier 2 Police & Fire	15.70%	140,882	22,118	15.12%	134,881	20,394
Total Police & Fire		**271,816**	**45,542**		**260,961**	**39,382**
Total		**$1,412,265**	**$194,093**		**$1,419,996**	**$139,384**
Employer normal cost rate						
General Service			**13.03%**			**8.63%**
Police & Fire			**16.75%**			**15.09%**
Aggregate (Default)			**13.74%**			**9.82%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$432,383
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.07%
B. Actual employer payroll	1,177,565
C. Payment to transition liability/(surplus)	24,376
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.07%
B. Actual employer payroll	1,266,990
C. Payment to transition liability/(surplus)	26,227
4. Supplemental payment to transition liability	0
5. Interest	30,542
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$412,322**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	412,322	432,383
2. Combined valuation payroll	2,252,117	2,184,562
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**1.62%**	**1.70%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,252,117	2,184,562
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Sheridan Fire District/2630
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Sheridan Fire District/2630

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Sheridan Fire District/2630

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Sheridan Fire District -- #2630

December 2013

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Executive Summary

Milliman has prepared this report for Sheridan Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Sheridan Fire District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Sheridan Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.94%)	(4.94%)	(4.94%)	(4.94%)	(4.94%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.79%**	**13.24%**	**17.79%**	**7.26%**	**11.36%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.35%**	**13.80%**	**18.35%**	**7.74%**	**11.84%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	18.42%	10.56%	18.42%	9.11%	11.82%
July 1, 2013 to June 30, 2015	16.05%	8.91%	16.05%	7.26%	9.99%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Sheridan Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$292,674	$379,284
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(159,154)	(155,997)
Allocated pooled OPSRP UAL	20,148	4,060
Side account	0	0
Net unfunded pension actuarial accrued liability	153,668	227,347
Combined valuation payroll	285,851	237,922
Net pension UAL as a percentage of payroll	54%	96%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.94%)	(5.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,997	$6,163
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	58,430	10,453	15.06%	58,430	8,800
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**58,430**	**10,453**		**58,430**	**8,800**
Total		**$58,430**	**$10,453**		**$58,430**	**$8,800**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($155,997)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(3.20%)
B. Actual employer payroll	136,491
C. Payment to transition liability/(surplus)	(4,368)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(3.20%)
B. Actual employer payroll	133,267
C. Payment to transition liability/(surplus)	(4,264)
4. Supplemental payment to transition liability	0
5. Interest	(11,789)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($159,154)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(159,154)	(155,997)
2. Combined valuation payroll	285,851	237,922
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.94%)**	**(5.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	285,851	237,922
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Seal Rock Water District/2734
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Seal Rock Water District/2734

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Seal Rock Water District/2734

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Seal Rock Water District -- #2734

December 2013

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Executive Summary

Milliman has prepared this report for Seal Rock Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Seal Rock Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Seal Rock Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.19%	12.19%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(6.05%)	(6.05%)	(6.05%)	(6.05%)	(6.05%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**10.98%**	**10.98%**	**15.51%**	**6.15%**	**10.25%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.54%**	**11.54%**	**16.07%**	**6.63%**	**10.73%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.86%	6.86%	14.45%	5.22%	7.93%
July 1, 2013 to June 30, 2015	6.44%	6.44%	13.01%	4.19%	6.92%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Seal Rock Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$414,248	$473,371
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(275,860)	(282,736)
Allocated pooled OPSRP UAL	28,517	5,067
Side account	0	0
Net unfunded pension actuarial accrued liability	166,905	195,702
Combined valuation payroll	404,591	296,942
Net pension UAL as a percentage of payroll	41%	66%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(6.05%)	(8.19%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,488	$7,692
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$48,460	$7,657	5.78%	$38,134	$2,204
Tier 2 General Service	10.58%	108,973	11,529	10.42%	55,084	5,740
Total General Service		**157,433**	**19,186**		**93,218**	**7,944**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$157,433**	**$19,186**		**$93,218**	**$7,944**
Employer normal cost rate						
General Service			**12.19%**			**8.52%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.19%**			**8.52%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($282,736)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.09%)
B. Actual employer payroll	189,613
C. Payment to transition liability/(surplus)	(13,444)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.09%)
B. Actual employer payroll	195,581
C. Payment to transition liability/(surplus)	(13,866)
4. Supplemental payment to transition liability	0
5. Interest	(20,434)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($275,860)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(275,860)	(282,736)
2. Combined valuation payroll	404,591	296,942
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.05%)**	**(8.19%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	404,591	296,942
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Seal Rock Rural Fire Protection District/2786
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Seal Rock Rural Fire Protection District/2786

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Seal Rock Rural Fire Protection District/2786

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Seal Rock Rural Fire Protection District -- #2786

December 2013

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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Executive Summary

Milliman has prepared this report for Seal Rock Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Seal Rock Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Seal Rock Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(9.24%)	(9.24%)	(9.24%)	(9.24%)	(9.24%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.54%**	**7.18%**	**9.54%**	**1.20%**	**5.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.10%**	**7.74%**	**10.10%**	**1.68%**	**5.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.25%	11.94%	19.72%	10.49%	13.20%
July 1, 2013 to June 30, 2015	5.87%	0.00%	5.87%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Seal Rock Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$61,451	$62,832
Allocated pre-SLGRP pooled liability/(surplus)	(11,892)	(8,043)
Transition liability/(surplus)	(62,484)	(62,335)
Allocated pooled OPSRP UAL	4,230	672
Side account	0	0
Net unfunded pension actuarial accrued liability	(8,695)	(6,874)
Combined valuation payroll	60,018	39,414
Net pension UAL as a percentage of payroll	(14%)	(17%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(9.24%)	(13.60%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,259	$1,021
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	60,018	9,423	15.12%	39,414	5,959
Total Police & Fire		**60,018**	**9,423**		**39,414**	**5,959**
Total		**$60,018**	**$9,423**		**$39,414**	**$5,959**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($62,335)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(7.79%)
B. Actual employer payroll	27,500
C. Payment to transition liability/(surplus)	(2,142)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(7.79%)
B. Actual employer payroll	30,000
C. Payment to transition liability/(surplus)	(2,337)
4. Supplemental payment to transition liability	0
5. Interest	(4,628)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($62,484)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(62,484)	(62,335)
2. Combined valuation payroll	60,018	39,414
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.24%)**	**(13.60%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	60,018	39,414
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Scio Fire District/2605
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Scio Fire District/2605

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Scio Fire District/2605

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Scio Fire District -- #2605

December 2013

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Executive Summary

Milliman has prepared this report for Scio Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Scio Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Scio Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(41.15%)	(41.15%)	(41.15%)	(41.15%)	(41.15%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Scio Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$31,345	$42,224
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(141,988)	(149,067)
Allocated pooled OPSRP UAL	2,158	452
Side account	0	0
Net unfunded pension actuarial accrued liability	(108,485)	(106,391)
Combined valuation payroll	30,614	26,487
Net pension UAL as a percentage of payroll	(354%)	(402%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(41.15%)	(48.41%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$642	$686
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$30,614	$4,837	5.78%	$26,487	$1,531
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**30,614**	**4,837**		**26,487**	**1,531**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$30,614**	**$4,837**		**$26,487**	**$1,531**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($149,067)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(15.07%)
B. Actual employer payroll	58,099
C. Payment to transition liability/(surplus)	(8,756)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(15.07%)
B. Actual employer payroll	58,668
C. Payment to transition liability/(surplus)	(8,841)
4. Supplemental payment to transition liability	0
5. Interest	(10,518)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($141,988)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(141,988)	(149,067)
2. Combined valuation payroll	30,614	26,487
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(41.15%)**	**(48.41%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	30,614	26,487
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

December 2013

Scappoose Rural Fire Protection District/2739
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Scappoose Rural Fire Protection District/2739

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Scappoose Rural Fire Protection District/2739

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Scappoose Rural Fire Protection District -- #2739

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Scappoose Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Scappoose Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Scappoose Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.56%	13.34%	16.56%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.70%)	(0.70%)	(0.70%)	(0.70%)	(0.70%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.94%**	**15.72%**	**18.94%**	**9.74%**	**13.84%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.50%**	**16.28%**	**19.50%**	**10.22%**	**14.32%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	19.01%	11.24%	19.01%	9.79%	12.50%
July 1, 2013 to June 30, 2015	19.10%	11.92%	19.10%	10.27%	13.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Scappoose Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,253,339	$1,848,889
Allocated pre-SLGRP pooled liability/(surplus)	(242,555)	(236,661)
Transition liability/(surplus)	(96,301)	(99,131)
Allocated pooled OPSRP UAL	86,279	19,789
Side account	0	0
Net unfunded pension actuarial accrued liability	1,000,762	1,532,886
Combined valuation payroll	1,224,120	1,159,795
Net pension UAL as a percentage of payroll	82%	132%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.70%)	(0.74%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$25,683	$30,045
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	334,636	59,866	15.06%	322,987	48,642
Tier 2 Police & Fire	15.70%	517,739	81,285	15.12%	481,502	72,803
Total Police & Fire		**852,375**	**141,151**		**804,489**	**121,445**
Total		**$852,375**	**$141,151**		**$804,489**	**$121,445**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.56%**			**15.10%**
Aggregate (Default)			**16.56%**			**15.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($99,131)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.82%)
B. Actual employer payroll	613,887
C. Payment to transition liability/(surplus)	(5,034)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.82%)
B. Actual employer payroll	601,026
C. Payment to transition liability/(surplus)	(4,929)
4. Supplemental payment to transition liability	0
5. Interest	(7,133)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($96,301)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(96,301)	(99,131)
2. Combined valuation payroll	1,224,120	1,159,795
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.70%)**	**(0.74%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,224,120	1,159,795
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Scappoose Public Library/2709
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Scappoose Public Library/2709

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Scappoose Public Library/2709

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Scappoose Public Library -- #2709

December 2013

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Executive Summary

Milliman has prepared this report for Scappoose Public Library to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Scappoose Public Library.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Scappoose Public Library

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.09%)	(9.09%)	(9.09%)	(9.09%)	(9.09%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.55%**	**11.55%**	**12.47%**	**3.11%**	**7.21%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.11%**	**12.11%**	**13.03%**	**3.59%**	**7.69%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	1.83%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	8.55%	0.00%	2.46%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Scappoose Public Library

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$133,752	$148,149
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(133,824)	(138,361)
Allocated pooled OPSRP UAL	9,207	1,586
Side account	0	0
Net unfunded pension actuarial accrued liability	9,135	11,374
Combined valuation payroll	130,634	92,933
Net pension UAL as a percentage of payroll	7%	12%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.09%)	(12.81%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,741	$2,407
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$76,403	$12,072	5.78%	$53,282	$3,080
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**76,403**	**12,072**		**53,282**	**3,080**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$76,403**	**$12,072**		**$53,282**	**$3,080**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($138,361)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(11.98%)
B. Actual employer payroll	57,439
C. Payment to transition liability/(surplus)	(6,953)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(11.98%)
B. Actual employer payroll	61,915
C. Payment to transition liability/(surplus)	(7,497)
4. Supplemental payment to transition liability	0
5. Interest	(9,913)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($133,824)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(133,824)	(138,361)
2. Combined valuation payroll	130,634	92,933
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.09%)**	**(12.81%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	130,634	92,933
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Santa Clara Rural Fire Protection District/2544
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Santa Clara Rural Fire Protection District/2544

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Santa Clara Rural Fire Protection District/2544

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Santa Clara Rural Fire Protection District -- #2544

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Santa Clara Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Santa Clara Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Santa Clara Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.89%	13.34%	17.89%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(2.91%)	(2.91%)	(2.91%)	(2.91%)	(2.91%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.82%**	**15.27%**	**19.82%**	**9.29%**	**13.39%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.38%**	**15.83%**	**20.38%**	**9.77%**	**13.87%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.96%	9.76%	17.96%	8.31%	11.02%
July 1, 2013 to June 30, 2015	18.75%	11.61%	18.75%	9.96%	12.69%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Santa Clara Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$117,223	$177,168
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(37,553)	(42,418)
Allocated pooled OPSRP UAL	8,070	1,896
Side account	0	0
Net unfunded pension actuarial accrued liability	87,740	136,646
Combined valuation payroll	114,490	111,136
Net pension UAL as a percentage of payroll	77%	123%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(2.91%)	(3.28%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,402	$2,879
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	66,438	11,886	15.06%	64,532	9,719
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**66,438**	**11,886**		**64,532**	**9,719**
Total		**$66,438**	**$11,886**		**$64,532**	**$9,719**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.89%**			**15.06%**
Aggregate (Default)			**17.89%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($42,418)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.00%)
B. Actual employer payroll	94,409
C. Payment to transition liability/(surplus)	(3,776)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.00%)
B. Actual employer payroll	96,779
C. Payment to transition liability/(surplus)	(3,871)
4. Supplemental payment to transition liability	0
5. Interest	(2,782)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($37,553)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(37,553)	(42,418)
2. Combined valuation payroll	114,490	111,136
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.91%)**	**(3.28%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	114,490	111,136
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Sandy Fire Department/2551
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Sandy Fire Department/2551

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Sandy Fire Department/2551

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Sandy Fire Department -- #2551

December 2013

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Executive Summary

Milliman has prepared this report for Sandy Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Sandy Fire Department.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Sandy Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.47%	10.58%	17.08%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(4.49%)	(4.49%)	(4.49%)	(4.49%)	(4.49%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.06%**	**9.17%**	**15.67%**	**5.95%**	**10.05%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.62%**	**9.73%**	**16.23%**	**6.43%**	**10.53%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.86%	9.94%	15.52%	6.18%	8.89%
July 1, 2013 to June 30, 2015	14.94%	10.78%	15.44%	6.63%	9.36%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Sandy Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,299,748	$2,041,673
Allocated pre-SLGRP pooled liability/(surplus)	(251,536)	(261,337)
Transition liability/(surplus)	(642,135)	(649,590)
Allocated pooled OPSRP UAL	89,474	21,852
Side account	0	0
Net unfunded pension actuarial accrued liability	495,551	1,152,598
Combined valuation payroll	1,269,448	1,280,727
Net pension UAL as a percentage of payroll	39%	90%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(4.49%)	(4.36%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$26,634	$33,178
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	104,132	11,017	10.42%	120,883	12,596
Total General Service		**104,132**	**11,017**		**120,883**	**12,596**
Tier 1 Police & Fire	17.89%	634,361	113,487	15.06%	626,210	94,307
Tier 2 Police & Fire	15.70%	374,472	58,792	15.12%	369,960	55,938
Total Police & Fire		**1,008,833**	**172,279**		**996,170**	**150,245**
Total		**$1,112,965**	**$183,296**		**$1,117,053**	**$162,841**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**17.08%**			**15.08%**
Aggregate (Default)			**16.47%**			**14.58%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($649,590)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.43%)
B. Actual employer payroll	602,506
C. Payment to transition liability/(surplus)	(26,691)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.43%)
B. Actual employer payroll	639,491
C. Payment to transition liability/(surplus)	(28,330)
4. Supplemental payment to transition liability	0
5. Interest	(47,566)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($642,135)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(642,135)	(649,590)
2. Combined valuation payroll	1,269,448	1,280,727
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.49%)**	**(4.36%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,269,448	1,280,727
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Rural Road Assessment District #3/2802
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Rural Road Assessment District #3/2802

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Rural Road Assessment District #3/2802

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

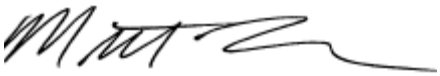
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

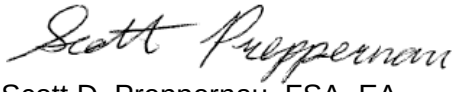
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Rural Road Assessment District #3 -- #2802

December 2013

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Executive Summary

Milliman has prepared this report for Rural Road Assessment District #3 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Rural Road Assessment District #3.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Rural Road Assessment District #3

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.17%	0.17%	0.17%	0.17%	0.17%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.83%**	**13.83%**	**19.97%**	**10.61%**	**14.71%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.39%**	**14.39%**	**20.53%**	**11.09%**	**15.19%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.57%	14.57%	20.04%	10.81%	13.52%
July 1, 2013 to June 30, 2015	14.94%	14.94%	19.61%	10.79%	13.52%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Rural Road Assessment District #3

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$210,227	$331,341
Allocated pre-SLGRP pooled liability/(surplus)	(40,685)	(42,412)
Transition liability/(surplus)	3,977	4,073
Allocated pooled OPSRP UAL	14,472	3,546
Side account	0	0
Net unfunded pension actuarial accrued liability	187,991	296,548
Combined valuation payroll	205,326	207,848
Net pension UAL as a percentage of payroll	92%	143%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.17%	0.17%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,308	$5,384
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	94,991	10,050	10.42%	94,345	9,831
Total General Service		**94,991**	**10,050**		**94,345**	**9,831**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$94,991**	**$10,050**		**$94,345**	**$9,831**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$4,073
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.20%
B. Actual employer payroll	96,438
C. Payment to transition liability/(surplus)	193
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.20%
B. Actual employer payroll	99,184
C. Payment to transition liability/(surplus)	198
4. Supplemental payment to transition liability	0
5. Interest	295
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$3,977**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	3,977	4,073
2. Combined valuation payroll	205,326	207,848
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.17%**	**0.17%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	205,326	207,848
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Roseburg Urban Sanitary Authority/2669
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Roseburg Urban Sanitary Authority/2669

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Roseburg Urban Sanitary Authority/2669

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Roseburg Urban Sanitary Authority -- #2669

December 2013

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Executive Summary

Milliman has prepared this report for Roseburg Urban Sanitary Authority to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Roseburg Urban Sanitary Authority.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Roseburg Urban Sanitary Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.06%	14.06%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.84%)	(4.84%)	(4.84%)	(4.84%)	(4.84%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.06%**	**14.06%**	**16.72%**	**7.36%**	**11.46%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.62%**	**14.62%**	**17.28%**	**7.84%**	**11.94%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.12%	8.12%	16.31%	7.08%	9.79%
July 1, 2013 to June 30, 2015	8.42%	8.42%	16.35%	7.53%	10.26%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Roseburg Urban Sanitary Authority

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$920,976	$1,369,303
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(491,139)	(499,617)
Allocated pooled OPSRP UAL	63,400	14,656
Side account	0	0
Net unfunded pension actuarial accrued liability	493,237	884,342
Combined valuation payroll	899,506	858,954
Net pension UAL as a percentage of payroll	55%	103%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.84%)	(5.00%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$18,872	$22,252
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$436,777	$69,011	5.78%	$416,990	$24,102
Tier 2 General Service	10.58%	218,181	23,084	10.42%	176,516	18,393
Total General Service		**654,958**	**92,095**		**593,506**	**42,495**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$654,958**	**$92,095**		**$593,506**	**$42,495**
Employer normal cost rate						
General Service			**14.06%**			**7.16%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.06%**			**7.16%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($499,617)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.23%)
B. Actual employer payroll	411,942
C. Payment to transition liability/(surplus)	(21,545)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.23%)
B. Actual employer payroll	445,799
C. Payment to transition liability/(surplus)	(23,314)
4. Supplemental payment to transition liability	0
5. Interest	(36,381)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($491,139)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(491,139)	(499,617)
2. Combined valuation payroll	899,506	858,954
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.84%)**	**(5.00%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	899,506	858,954
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Rogue River Valley Irrigation District/2585
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Rogue River Valley Irrigation District/2585

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Rogue River Valley Irrigation District/2585

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Rogue River Valley Irrigation District -- #2585

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Rogue River Valley Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Rogue River Valley Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Rogue River Valley Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.97%	11.97%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	8.52%	8.52%	8.52%	8.52%	8.52%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**25.33%**	**25.33%**	**30.08%**	**20.72%**	**24.82%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**25.89%**	**25.89%**	**30.64%**	**21.20%**	**25.30%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	25.94%	25.94%	32.53%	23.30%	26.01%
July 1, 2013 to June 30, 2015	24.01%	24.01%	29.92%	21.10%	23.83%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Rogue River Valley Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$270,776	$414,856
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	253,995	263,801
Allocated pooled OPSRP UAL	18,640	4,440
Side account	0	0
Net unfunded pension actuarial accrued liability	543,411	683,097
Combined valuation payroll	264,464	260,236
Net pension UAL as a percentage of payroll	205%	262%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	8.52%	8.72%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,549	$6,742
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$38,287	$6,049	5.78%	$37,678	$2,178
Tier 2 General Service	10.58%	105,910	11,205	10.42%	103,527	10,788
Total General Service		**144,197**	**17,254**		**141,205**	**12,966**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$144,197**	**$17,254**		**$141,205**	**$12,966**
Employer normal cost rate						
General Service			**11.97%**			**9.18%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.97%**			**9.18%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$263,801
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	10.99%
B. Actual employer payroll	129,369
C. Payment to transition liability/(surplus)	14,218
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	10.99%
B. Actual employer payroll	131,048
C. Payment to transition liability/(surplus)	14,402
4. Supplemental payment to transition liability	0
5. Interest	18,814
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$253,995**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	253,995	263,801
2. Combined valuation payroll	264,464	260,236
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**8.52%**	**8.72%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	264,464	260,236
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Rogue River Fire District/2549
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Rogue River Fire District/2549

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Rogue River Fire District/2549

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Rogue River Fire District -- #2549

December 2013

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Executive Summary

Milliman has prepared this report for Rogue River Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Rogue River Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Rogue River Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.16%	13.41%	16.65%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(5.82%)	(5.82%)	(5.82%)	(5.82%)	(5.82%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.42%**	**10.67%**	**13.91%**	**4.62%**	**8.72%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.98%**	**11.23%**	**14.47%**	**5.10%**	**9.20%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.37%	7.54%	15.28%	6.01%	8.72%
July 1, 2013 to June 30, 2015	14.30%	8.09%	15.29%	6.47%	9.20%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Rogue River Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$772,071	$1,462,518
Allocated pre-SLGRP pooled liability/(surplus)	(149,417)	(187,204)
Transition liability/(surplus)	(494,827)	(499,638)
Allocated pooled OPSRP UAL	53,149	15,653
Side account	0	0
Net unfunded pension actuarial accrued liability	180,976	791,329
Combined valuation payroll	754,072	917,427
Net pension UAL as a percentage of payroll	24%	86%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(5.82%)	(4.68%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$15,821	$23,766
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$48,521	$7,666	5.78%	$47,249	$2,731
Tier 2 General Service	10.58%	40,913	4,329	10.42%	39,551	4,121
Total General Service		**89,434**	**11,995**		**86,800**	**6,852**
Tier 1 Police & Fire	17.89%	218,727	39,130	15.06%	287,105	43,238
Tier 2 Police & Fire	15.70%	287,014	45,061	15.12%	260,614	39,405
Total Police & Fire		**505,741**	**84,191**		**547,719**	**82,643**
Total		**$595,175**	**$96,186**		**$634,519**	**$89,495**
Employer normal cost rate						
General Service			**13.41%**			**7.89%**
Police & Fire			**16.65%**			**15.09%**
Aggregate (Default)			**16.16%**			**14.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($499,638)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.60%)
B. Actual employer payroll	456,198
C. Payment to transition liability/(surplus)	(20,985)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.60%)
B. Actual employer payroll	445,212
C. Payment to transition liability/(surplus)	(20,480)
4. Supplemental payment to transition liability	0
5. Interest	(36,654)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($494,827)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(494,827)	(499,638)
2. Combined valuation payroll	754,072	917,427
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.82%)**	**(4.68%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	754,072	917,427
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Rogue Community College/2922
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Rogue Community College/2922

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Rogue Community College/2922

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Rogue Community College -- #2922

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Rogue Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Rogue Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Rogue Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(7.85%)	(7.85%)	(7.85%)	(7.85%)	(7.85%)
Net pension contribution rate	**11.99%**	**11.99%**	**15.56%**	**6.20%**	**10.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.55%**	**12.55%**	**16.12%**	**6.68%**	**10.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.83%	7.83%	15.49%	6.26%	8.97%
July 1, 2013 to June 30, 2015	8.73%	8.73%	15.75%	6.93%	9.66%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Rogue Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$19,805,992	$30,819,539
Allocated pre-SLGRP pooled liability/(surplus)	4,033,094	4,188,653
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	1,363,437	329,865
Side account	17,111,778	16,425,545
Net unfunded pension actuarial accrued liability	8,090,745	18,912,512
Combined valuation payroll	19,344,264	19,332,877
Net pension UAL as a percentage of payroll	42%	98%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(7.85%)	(7.31%)
Allocated pooled RHIA UAL	$405,851	$500,828
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$16,425,545**	**$16,425,545**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(1,611,525)	(1,611,525)
5. Side account earnings during 2012		2,298,758	2,298,758
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$17,111,778**	**$17,111,778**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$17,111,778	$16,425,545
Side Account 2	0	0
Side Account 3	0	0
Total	**$17,111,778**	**$16,425,545**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$17,111,778	$16,425,545
2. Combined valuation payroll	19,344,264	19,332,877
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(7.85%)	(7.31%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Redmond Fire & Rescue/2590
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Redmond Fire & Rescue/2590

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Redmond Fire & Rescue/2590

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

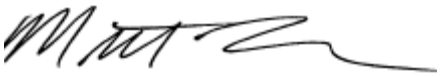
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

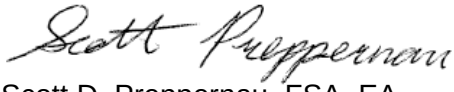
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Redmond Fire & Rescue -- #2590

December 2013

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Executive Summary

Milliman has prepared this report for Redmond Fire & Rescue to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Redmond Fire & Rescue.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Redmond Fire & Rescue

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.43%	15.80%	16.45%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.57%)	(5.57%)	(5.57%)	(5.57%)	(5.57%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.70%**	**15.07%**	**15.72%**	**6.63%**	**10.73%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.26%**	**15.63%**	**16.28%**	**7.11%**	**11.21%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.69%	8.68%	15.99%	6.83%	9.54%
July 1, 2013 to June 30, 2015	15.21%	6.19%	15.51%	6.68%	9.41%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Redmond Fire & Rescue

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$3,790,992	$5,690,250
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(2,323,753)	(2,367,037)
Allocated pooled OPSRP UAL	260,970	60,903
Side account	0	0
Net unfunded pension actuarial accrued liability	1,728,209	3,384,116
Combined valuation payroll	3,702,614	3,569,453
Net pension UAL as a percentage of payroll	47%	95%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.57%)	(5.70%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$77,682	$92,468
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$87,778	$13,869	5.78%	$88,256	$5,101
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**87,778**	**13,869**		**88,256**	**5,101**
Tier 1 Police & Fire	17.89%	930,924	166,542	15.06%	895,147	134,809
Tier 2 Police & Fire	15.70%	1,792,336	281,397	15.12%	1,729,137	261,446
Total Police & Fire		**2,723,260**	**447,939**		**2,624,284**	**396,255**
Total		**$2,811,038**	**$461,808**		**$2,712,540**	**$401,356**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.45%**			**15.10%**
Aggregate (Default)			**16.43%**			**14.80%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($2,367,037)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.10%)
B. Actual employer payroll	1,708,218
C. Payment to transition liability/(surplus)	(104,201)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.10%)
B. Actual employer payroll	1,823,158
C. Payment to transition liability/(surplus)	(111,213)
4. Supplemental payment to transition liability	0
5. Interest	(172,130)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($2,323,753)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(2,323,753)	(2,367,037)
2. Combined valuation payroll	3,702,614	3,569,453
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.57%)**	**(5.70%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	3,702,614	3,569,453
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Rainier Cemetery District/2776
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Rainier Cemetery District/2776

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Rainier Cemetery District/2776

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Rainier Cemetery District -- #2776

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Rainier Cemetery District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Rainier Cemetery District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Rainier Cemetery District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(12.54%)	(12.54%)	(12.54%)	(12.54%)	(12.54%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**6.23%**	**5.64%**	**9.02%**	**0.00%**	**3.76%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**6.79%**	**6.20%**	**9.58%**	**0.48%**	**4.24%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.00%	0.00%	3.51%	0.00%	0.00%
July 1, 2013 to June 30, 2015	0.00%	0.00%	0.28%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Rainier Cemetery District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$66,936	$61,160
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(92,440)	(93,313)
Allocated pooled OPSRP UAL	4,608	655
Side account	0	0
Net unfunded pension actuarial accrued liability	(20,896)	(31,498)
Combined valuation payroll	65,376	38,365
Net pension UAL as a percentage of payroll	(32%)	(82%)
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(12.54%)	(20.92%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,372	$994
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($93,313)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(15.07%)
B. Actual employer payroll	29,356
C. Payment to transition liability/(surplus)	(3,614)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(15.07%)
B. Actual employer payroll	33,360
C. Payment to transition liability/(surplus)	(4,106)
4. Supplemental payment to transition liability	0
5. Interest	(6,847)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($92,440)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(92,440)	(93,313)
2. Combined valuation payroll	65,376	38,365
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(12.54%)**	**(20.92%)**

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	65,376	38,365
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

Rainbow Water District/2542
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Rainbow Water District/2542

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Rainbow Water District/2542

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Rainbow Water District -- #2542

December 2013

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Executive Summary

Milliman has prepared this report for Rainbow Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Rainbow Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Rainbow Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	2.03%	2.03%	2.03%	2.03%	2.03%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.91%**	**20.91%**	**21.83%**	**12.47%**	**16.57%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.47%**	**21.47%**	**22.39%**	**12.95%**	**17.05%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.32%	12.32%	21.88%	12.65%	15.36%
July 1, 2013 to June 30, 2015	12.40%	12.40%	21.71%	12.89%	15.62%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Rainbow Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$471,376	$694,028
Allocated pre-SLGRP pooled liability/(surplus)	(91,224)	(88,837)
Transition liability/(surplus)	105,516	106,547
Allocated pooled OPSRP UAL	32,449	7,428
Side account	0	0
Net unfunded pension actuarial accrued liability	518,117	719,166
Combined valuation payroll	460,387	435,359
Net pension UAL as a percentage of payroll	113%	165%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	2.03%	2.11%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,659	$11,278
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$206,049	$32,556	5.78%	$197,443	$11,412
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**206,049**	**32,556**		**197,443**	**11,412**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$206,049**	**$32,556**		**$197,443**	**$11,412**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$106,547
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.04%
B. Actual employer payroll	208,724
C. Payment to transition liability/(surplus)	4,258
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.04%
B. Actual employer payroll	224,974
C. Payment to transition liability/(surplus)	4,589
4. Supplemental payment to transition liability	0
5. Interest	7,816
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$105,516**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	105,516	106,547
2. Combined valuation payroll	460,387	435,359
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.03%**	**2.11%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	460,387	435,359
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Portland Housing Authority/2519
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Portland Housing Authority/2519

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Portland Housing Authority/2519

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Portland Housing Authority -- #2519

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Portland Housing Authority to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Portland Housing Authority.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Portland Housing Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.71%	12.71%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(4.59%)	(4.59%)	(4.59%)	(4.59%)	(4.59%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.96%**	**12.96%**	**16.97%**	**7.61%**	**11.71%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.52%**	**13.52%**	**17.53%**	**8.09%**	**12.19%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.92%	9.92%	17.10%	7.87%	10.58%
July 1, 2013 to June 30, 2015	10.11%	10.11%	16.74%	7.92%	10.65%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Portland Housing Authority

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$14,420,665	$22,711,556
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(7,282,059)	(7,382,520)
Allocated pooled OPSRP UAL	992,713	243,084
Side account	0	0
Net unfunded pension actuarial accrued liability	8,131,319	15,572,120
Combined valuation payroll	14,084,483	14,246,797
Net pension UAL as a percentage of payroll	58%	109%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(4.59%)	(4.46%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$295,498	$369,070
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$3,048,670	$481,690	5.78%	$3,333,703	$192,688
Tier 2 General Service	10.58%	4,408,938	466,466	10.42%	4,571,555	476,356
Total General Service		**7,457,608**	**948,156**		**7,905,258**	**669,044**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$7,457,608**	**$948,156**		**$7,905,258**	**$669,044**
Employer normal cost rate						
General Service			**12.71%**			**8.46%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.71%**			**8.46%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($7,382,520)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.44%)
B. Actual employer payroll	7,316,637
C. Payment to transition liability/(surplus)	(324,859)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.44%)
B. Actual employer payroll	7,094,913
C. Payment to transition liability/(surplus)	(315,014)
4. Supplemental payment to transition liability	0
5. Interest	(539,412)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($7,282,059)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(7,282,059)	(7,382,520)
2. Combined valuation payroll	14,084,483	14,246,797
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(4.59%)**	**(4.46%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	14,084,483	14,246,797
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Portland Community College/2918
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Portland Community College/2918

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Portland Community College/2918

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Portland Community College -- #2918

December 2013

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Executive Summary

Milliman has prepared this report for Portland Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Portland Community College.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Portland Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(8.17%)	(8.17%)	(8.17%)	(8.17%)	(8.17%)
Net pension contribution rate	**11.67%**	**11.67%**	**15.24%**	**5.88%**	**9.98%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.23%**	**12.23%**	**15.80%**	**6.36%**	**10.46%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.51%	6.51%	14.17%	4.94%	7.65%
July 1, 2013 to June 30, 2015	7.73%	7.73%	14.75%	5.93%	8.66%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Portland Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$127,388,766	$190,046,764
Allocated pre-SLGRP pooled liability/(surplus)	25,940,172	25,829,069
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	8,769,394	2,034,090
Side account	114,557,281	115,108,347
Net unfunded pension actuarial accrued liability	47,541,051	102,801,576
Combined valuation payroll	124,419,010	119,214,980
Net pension UAL as a percentage of payroll	38%	86%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(8.17%)	(8.31%)
Allocated pooled RHIA UAL	$2,610,364	$3,088,324
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$115,108,347**	**$115,108,347**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(16,094,259)	(16,094,259)
5. Side account earnings during 2012		15,544,193	15,544,193
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$114,557,281**	**$114,557,281**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$114,557,281	$115,108,347
Side Account 2	0	0
Side Account 3	0	0
Total	**$114,557,281**	**$115,108,347**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$114,557,281	$115,108,347
2. Combined valuation payroll	124,419,010	119,214,980
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(8.17%)	(8.31%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Port Orford Library/2673
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Port Orford Library/2673

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
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This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Port Orford Library -- #2673

December 2013

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Executive Summary

Milliman has prepared this report for Port Orford Library to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Port Orford Library.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Port Orford Library

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(11.06%)	(11.06%)	(11.06%)	(11.06%)	(11.06%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**2.60%**	**2.60%**	**8.74%**	**0.00%**	**3.48%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**3.16%**	**3.16%**	**9.30%**	**0.48%**	**3.96%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.36%	6.36%	11.83%	2.60%	5.31%
July 1, 2013 to June 30, 2015	1.82%	1.82%	6.49%	0.00%	0.40%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Port Orford Library

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$30,665	$41,842
Allocated pre-SLGRP pooled liability/(surplus)	(5,934)	(5,356)
Transition liability/(surplus)	(37,346)	(39,504)
Allocated pooled OPSRP UAL	2,111	448
Side account	0	0
Net unfunded pension actuarial accrued liability	(10,504)	(2,570)
Combined valuation payroll	29,950	26,247
Net pension UAL as a percentage of payroll	(35%)	(10%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(11.06%)	(12.95%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$628	$680
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	26,494	2,803	10.42%	26,247	2,735
Total General Service		**26,494**	**2,803**		**26,247**	**2,735**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$26,494**	**$2,803**		**$26,247**	**$2,735**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($39,504)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.01%)
B. Actual employer payroll	29,828
C. Payment to transition liability/(surplus)	(2,389)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.01%)
B. Actual employer payroll	31,656
C. Payment to transition liability/(surplus)	(2,535)
4. Supplemental payment to transition liability	0
5. Interest	(2,766)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($37,346)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(37,346)	(39,504)
2. Combined valuation payroll	29,950	26,247
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(11.06%)**	**(12.95%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	29,950	26,247
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Port of Tillamook Bay/2713
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Port of Tillamook Bay/2713

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Port of Tillamook Bay/2713

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Port of Tillamook Bay -- #2713

December 2013

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Executive Summary

Milliman has prepared this report for Port of Tillamook Bay to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Port of Tillamook Bay.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Port of Tillamook Bay

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.38%	13.38%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.84%)	(1.84%)	(1.84%)	(1.84%)	(1.84%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.62%**	**14.62%**	**17.96%**	**8.60%**	**12.70%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.18%**	**15.18%**	**18.52%**	**9.08%**	**13.18%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.67%	9.67%	17.52%	8.29%	11.00%
July 1, 2013 to June 30, 2015	10.31%	10.31%	17.52%	8.70%	11.43%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Port of Tillamook Bay

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$818,957	$1,208,228
Allocated pre-SLGRP pooled liability/(surplus)	(158,490)	(154,655)
Transition liability/(surplus)	(165,951)	(168,927)
Allocated pooled OPSRP UAL	56,377	12,932
Side account	0	0
Net unfunded pension actuarial accrued liability	550,893	897,578
Combined valuation payroll	799,865	757,913
Net pension UAL as a percentage of payroll	69%	118%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.84%)	(1.92%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$16,782	$19,634
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$223,702	$35,345	5.78%	$250,971	$14,506
Tier 2 General Service	10.58%	193,225	20,443	10.42%	208,109	21,685
Total General Service		**416,927**	**55,788**		**459,080**	**36,191**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$416,927**	**$55,788**		**$459,080**	**$36,191**
Employer normal cost rate						
General Service			**13.38%**			**7.88%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.38%**			**7.88%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($168,927)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.32%)
B. Actual employer payroll	313,495
C. Payment to transition liability/(surplus)	(7,273)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.32%)
B. Actual employer payroll	344,656
C. Payment to transition liability/(surplus)	(7,996)
4. Supplemental payment to transition liability	0
5. Interest	(12,293)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($165,951)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(165,951)	(168,927)
2. Combined valuation payroll	799,865	757,913
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.84%)**	**(1.92%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	799,865	757,913
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Port of The Dalles/2501
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Port of The Dalles/2501

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Port of The Dalles/2501

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Port of The Dalles -- #2501

December 2013

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Executive Summary

Milliman has prepared this report for Port of The Dalles to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Port of The Dalles.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Port of The Dalles

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	11.98%	11.98%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(14.62%)	(14.62%)	(14.62%)	(14.62%)	(14.62%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**0.44%**	**0.44%**	**5.18%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**1.00%**	**1.00%**	**5.74%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	0.19%	0.19%	6.72%	0.00%	0.20%
July 1, 2013 to June 30, 2015	0.00%	0.00%	5.37%	0.00%	0.00%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Port of The Dalles

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$156,307	$244,908
Allocated pre-SLGRP pooled liability/(surplus)	(30,250)	(31,349)
Transition liability/(surplus)	(251,638)	(251,278)
Allocated pooled OPSRP UAL	10,760	2,621
Side account	0	0
Net unfunded pension actuarial accrued liability	(114,821)	(35,098)
Combined valuation payroll	152,663	153,629
Net pension UAL as a percentage of payroll	(75%)	(23%)
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(14.62%)	(14.07%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,203	$3,980
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$31,243	$4,936	5.78%	$30,923	$1,787
Tier 2 General Service	10.58%	85,176	9,012	10.42%	85,901	8,951
Total General Service		**116,419**	**13,948**		**116,824**	**10,738**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$116,419**	**$13,948**		**$116,824**	**$10,738**
Employer normal cost rate						
General Service			**11.98%**			**9.19%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**11.98%**			**9.19%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($251,278)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(13.12%)
B. Actual employer payroll	71,819
C. Payment to transition liability/(surplus)	(9,001)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(13.12%)
B. Actual employer payroll	74,083
C. Payment to transition liability/(surplus)	(9,279)
4. Supplemental payment to transition liability	0
5. Interest	(18,640)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($251,638)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(251,638)	(251,278)
2. Combined valuation payroll	152,663	153,629
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(14.62%)**	**(14.07%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	152,663	153,629
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

Port of Portland/2512
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Port of Portland/2512

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Port of Portland/2512

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Port of Portland -- #2512

December 2013

Secondary Employers

2151 Portland Dock Commission

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Executive Summary

Milliman has prepared this report for Port of Portland to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Port of Portland.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Port of Portland

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.48%	12.84%	16.59%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.13%)	(0.13%)	(0.13%)	(0.13%)	(0.13%)
Side account rate relief [2]	(4.67%)	(4.67%)	(4.67%)	(4.67%)	(4.67%)
Net pension contribution rate	**11.76%**	**11.12%**	**14.87%**	**5.64%**	**9.74%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.32%**	**11.68%**	**15.43%**	**6.12%**	**10.22%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.73%	7.55%	14.87%	5.69%	8.40%
July 1, 2013 to June 30, 2015	9.21%	8.10%	14.84%	6.02%	8.75%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Port of Portland

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$64,126,769	$96,760,279
Allocated pre-SLGRP pooled liability/(surplus)	(12,410,263)	(12,385,459)
Transition liability/(surplus)	(896,284)	(911,980)
Allocated pooled OPSRP UAL	4,414,462	1,035,635
Side account	32,944,089	31,558,869
Net unfunded pension actuarial accrued liability	22,290,595	52,939,606
Combined valuation payroll	62,631,811	60,697,033
Net pension UAL as a percentage of payroll	36%	87%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.13%)	(0.13%)
Side account rate relief	(4.67%)	(4.47%)
Allocated pooled RHIA UAL	$1,314,042	$1,572,387
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$13,391,979	$2,115,933	5.78%	$14,046,311	$811,877
Tier 2 General Service	10.58%	17,475,717	1,848,931	10.42%	17,472,395	1,820,624
Total General Service		**30,867,696**	**3,964,864**		**31,518,706**	**2,632,501**
Tier 1 Police & Fire	17.89%	2,567,034	459,242	15.06%	2,664,132	401,218
Tier 2 Police & Fire	15.70%	3,776,721	592,945	15.12%	3,531,525	533,967
Total Police & Fire		**6,343,755**	**1,052,187**		**6,195,657**	**935,185**
Total		**$37,211,451**	**$5,017,051**		**$37,714,363**	**$3,567,686**
Employer normal cost rate						
General Service			**12.84%**			**8.35%**
Police & Fire			**16.59%**			**15.09%**
Aggregate (Default)			**13.48%**			**9.46%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($911,980)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.13%)
B. Actual employer payroll	29,860,818
C. Payment to transition liability/(surplus)	(38,819)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.13%)
B. Actual employer payroll	33,283,245
C. Payment to transition liability/(surplus)	(43,268)
4. Supplemental payment to transition liability	0
5. Interest	(66,391)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($896,284)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(896,284)	(911,980)
2. Combined valuation payroll	62,631,811	60,697,033
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.13%)**	**(0.13%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$31,558,869**	**$31,558,869**
2. Deposits during 2012		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2012		(3,037,700)	(3,037,700)
5. Side account earnings during 2012		4,424,921	4,424,921
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$32,944,089**	**$32,944,089**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$16,722,815	$16,018,603
Side Account 2	16,221,274	15,540,266
Side Account 3	0	0
Total	**$32,944,089**	**$31,558,869**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$32,944,089	$31,558,869
2. Combined valuation payroll	62,631,811	60,697,033
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(4.67%)	(4.47%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Port of Newport/2625
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Port of Newport/2625

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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Milliman

December 2013
Port of Newport/2625

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Port of Newport -- #2625

December 2013

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Executive Summary

Milliman has prepared this report for Port of Newport to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Port of Newport.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Port of Newport

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.26%	15.26%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(8.10%)	(8.10%)	(8.10%)	(8.10%)	(8.10%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.00%**	**12.00%**	**13.46%**	**4.10%**	**8.20%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.56%**	**12.56%**	**14.02%**	**4.58%**	**8.68%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	4.46%	4.46%	13.42%	4.19%	6.90%
July 1, 2013 to June 30, 2015	3.47%	3.47%	12.34%	3.52%	6.25%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Port of Newport

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$874,195	$1,175,953
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(779,185)	(787,568)
Allocated pooled OPSRP UAL	60,179	12,586
Side account	0	0
Net unfunded pension actuarial accrued liability	155,189	400,971
Combined valuation payroll	853,815	737,667
Net pension UAL as a percentage of payroll	18%	54%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(8.10%)	(9.18%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$17,913	$19,110
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$372,598	$58,870	5.78%	$452,913	$26,178
Tier 2 General Service	10.58%	42,856	4,534	10.42%	47,955	4,997
Total General Service		**415,454**	**63,404**		**500,868**	**31,175**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$415,454**	**$63,404**		**$500,868**	**$31,175**
Employer normal cost rate						
General Service			**15.26%**			**6.22%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.26%**			**6.22%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($787,568)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.12%)
B. Actual employer payroll	405,289
C. Payment to transition liability/(surplus)	(32,909)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.12%)
B. Actual employer payroll	408,756
C. Payment to transition liability/(surplus)	(33,191)
4. Supplemental payment to transition liability	0
5. Interest	(57,717)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($779,185)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(779,185)	(787,568)
2. Combined valuation payroll	853,815	737,667
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.10%)**	**(9.18%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	853,815	737,667
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
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December 2013

Port of Garibaldi/2741
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Port of Garibaldi/2741

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Port of Garibaldi/2741

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Port of Garibaldi -- #2741

December 2013

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Executive Summary

Milliman has prepared this report for Port of Garibaldi to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Port of Garibaldi.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Port of Garibaldi

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.04%	13.04%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.83%)	(2.83%)	(2.83%)	(2.83%)	(2.83%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.29%**	**13.29%**	**16.97%**	**7.61%**	**11.71%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.85%**	**13.85%**	**17.53%**	**8.09%**	**12.19%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.27%	9.27%	17.44%	8.21%	10.92%
July 1, 2013 to June 30, 2015	9.38%	9.38%	17.11%	8.29%	11.02%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Port of Garibaldi

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$249,227	$461,025
Allocated pre-SLGRP pooled liability/(surplus)	(48,232)	(59,012)
Transition liability/(surplus)	(77,653)	(78,473)
Allocated pooled OPSRP UAL	17,157	4,934
Side account	0	0
Net unfunded pension actuarial accrued liability	140,499	328,474
Combined valuation payroll	243,417	289,198
Net pension UAL as a percentage of payroll	58%	114%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.83%)	(2.33%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,107	$7,492
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$42,876	$6,774	5.78%	$91,773	$5,304
Tier 2 General Service	10.58%	47,913	5,069	10.42%	47,238	4,922
Total General Service		**90,789**	**11,843**		**139,011**	**10,226**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$90,789**	**$11,843**		**$139,011**	**$10,226**
Employer normal cost rate						
General Service			**13.04%**			**7.36%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.04%**			**7.36%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($78,473)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.40%)
B. Actual employer payroll	138,074
C. Payment to transition liability/(surplus)	(3,314)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.40%)
B. Actual employer payroll	135,783
C. Payment to transition liability/(surplus)	(3,258)
4. Supplemental payment to transition liability	0
5. Interest	(5,752)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($77,653)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(77,653)	(78,473)
2. Combined valuation payroll	243,417	289,198
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.83%)**	**(2.33%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	243,417	289,198
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Port of Coos Bay/2513
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Port of Coos Bay/2513

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Port of Coos Bay/2513

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Port of Coos Bay -- #2513

December 2013

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Executive Summary

Milliman has prepared this report for Port of Coos Bay to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Port of Coos Bay.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Port of Coos Bay

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.70%	13.70%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.69%)	(1.69%)	(1.69%)	(1.69%)	(1.69%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.85%**	**16.85%**	**19.87%**	**10.51%**	**14.61%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.41%**	**17.41%**	**20.43%**	**10.99%**	**15.09%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.59%	11.59%	19.79%	10.56%	13.27%
July 1, 2013 to June 30, 2015	12.02%	12.02%	19.47%	10.65%	13.38%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Port of Coos Bay

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,232,424	$1,855,119
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(229,381)	(233,699)
Allocated pooled OPSRP UAL	84,840	19,856
Side account	0	0
Net unfunded pension actuarial accrued liability	1,087,883	1,641,276
Combined valuation payroll	1,203,693	1,163,703
Net pension UAL as a percentage of payroll	90%	141%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.69%)	(1.73%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$25,254	$30,146
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$340,592	$53,814	5.78%	$333,814	$19,294
Tier 2 General Service	10.58%	230,019	24,336	10.42%	223,228	23,260
Total General Service		**570,611**	**78,150**		**557,042**	**42,554**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$570,611**	**$78,150**		**$557,042**	**$42,554**
Employer normal cost rate						
General Service			**13.70%**			**7.64%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.70%**			**7.64%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($233,699)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.75%)
B. Actual employer payroll	594,037
C. Payment to transition liability/(surplus)	(10,396)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.75%)
B. Actual employer payroll	623,596
C. Payment to transition liability/(surplus)	(10,913)
4. Supplemental payment to transition liability	0
5. Interest	(16,991)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($229,381)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(229,381)	(233,699)
2. Combined valuation payroll	1,203,693	1,163,703
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.69%)**	**(1.73%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,203,693	1,163,703
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Pleasant Hill Fire Department/2650
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Pleasant Hill Fire Department/2650

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Pleasant Hill Fire Department/2650

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Pleasant Hill Fire Department -- #2650

December 2013

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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Executive Summary

Milliman has prepared this report for Pleasant Hill Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Pleasant Hill Fire Department.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Pleasant Hill Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(3.26%)	(3.26%)	(3.26%)	(3.26%)	(3.26%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.75%**	**13.16%**	**16.54%**	**7.18%**	**11.28%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.31%**	**13.72%**	**17.10%**	**7.66%**	**11.76%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.27%	9.96%	17.74%	8.51%	11.22%
July 1, 2013 to June 30, 2015	11.34%	10.11%	17.28%	8.46%	11.19%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Pleasant Hill Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$38,935	$87,117
Allocated pre-SLGRP pooled liability/(surplus)	(7,535)	(11,151)
Transition liability/(surplus)	(13,990)	(13,697)
Allocated pooled OPSRP UAL	2,680	932
Side account	0	0
Net unfunded pension actuarial accrued liability	20,090	63,201
Combined valuation payroll	38,027	54,648
Net pension UAL as a percentage of payroll	53%	116%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(3.26%)	(2.16%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$798	$1,416
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($13,697)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.10%)
B. Actual employer payroll	35,386
C. Payment to transition liability/(surplus)	(743)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.10%)
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	(1,036)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($13,990)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(13,990)	(13,697)
2. Combined valuation payroll	38,027	54,648
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.26%)**	**(2.16%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	38,027	54,648
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Philomath Fire Department/2694
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Philomath Fire Department/2694

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Philomath Fire Department/2694

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Philomath Fire Department -- #2694

December 2013

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Executive Summary

Milliman has prepared this report for Philomath Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Philomath Fire Department.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Philomath Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	17.00%	13.34%	17.00%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.42%)	(1.42%)	(1.42%)	(1.42%)	(1.42%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.66%**	**15.00%**	**18.66%**	**9.02%**	**13.12%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.22%**	**15.56%**	**19.22%**	**9.50%**	**13.60%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	17.83%	9.99%	17.83%	8.54%	11.25%
July 1, 2013 to June 30, 2015	18.32%	11.16%	18.32%	9.51%	12.24%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Philomath Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$392,740	$558,248
Allocated pre-SLGRP pooled liability/(surplus)	(76,006)	(71,457)
Transition liability/(surplus)	(61,304)	(64,588)
Allocated pooled OPSRP UAL	27,036	5,975
Side account	0	0
Net unfunded pension actuarial accrued liability	282,466	428,178
Combined valuation payroll	383,584	350,185
Net pension UAL as a percentage of payroll	74%	122%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.42%)	(1.59%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,048	$9,072
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	86,135	15,410	15.06%	86,277	12,993
Tier 2 Police & Fire	15.70%	59,141	9,285	15.12%	61,085	9,236
Total Police & Fire		**145,276**	**24,695**		**147,362**	**22,229**
Total		**$145,276**	**$24,695**		**$147,362**	**$22,229**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**17.00%**			**15.08%**
Aggregate (Default)			**17.00%**			**15.08%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($64,588)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.07%)
B. Actual employer payroll	185,383
C. Payment to transition liability/(surplus)	(3,837)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.07%)
B. Actual employer payroll	192,612
C. Payment to transition liability/(surplus)	(3,988)
4. Supplemental payment to transition liability	0
5. Interest	(4,541)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($61,304)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(61,304)	(64,588)
2. Combined valuation payroll	383,584	350,185
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.42%)**	**(1.59%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	383,584	350,185
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Parkdale Fire District/2684
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Parkdale Fire District/2684

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Parkdale Fire District/2684

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Parkdale Fire District -- #2684

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Parkdale Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Parkdale Fire District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Parkdale Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.61%	0.61%	0.61%	0.61%	0.61%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.15%**	**18.79%**	**21.15%**	**12.81%**	**16.91%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.71%**	**19.35%**	**21.71%**	**13.29%**	**17.39%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	21.86%	14.50%	21.86%	13.05%	15.76%
July 1, 2013 to June 30, 2015	21.96%	14.76%	21.96%	13.11%	15.84%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Parkdale Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$97,744	$126,918
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	6,517	6,720
Allocated pooled OPSRP UAL	6,729	1,358
Side account	0	0
Net unfunded pension actuarial accrued liability	110,990	134,996
Combined valuation payroll	95,465	79,615
Net pension UAL as a percentage of payroll	116%	170%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.61%	0.73%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,003	$2,062
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	65,465	10,278	15.12%	65,515	9,906
Total Police & Fire		**65,465**	**10,278**		**65,515**	**9,906**
Total		**$65,465**	**$10,278**		**$65,515**	**$9,906**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$6,720
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.74%
B. Actual employer payroll	46,329
C. Payment to transition liability/(surplus)	343
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.74%
B. Actual employer payroll	46,329
C. Payment to transition liability/(surplus)	343
4. Supplemental payment to transition liability	0
5. Interest	483
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$6,517**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	6,517	6,720
2. Combined valuation payroll	95,465	79,615
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.61%**	**0.73%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	95,465	79,615
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Oregon Trail Library District/2774
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Oregon Trail Library District/2774

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Oregon Trail Library District/2774

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Oregon Trail Library District -- #2774

December 2013

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Executive Summary

Milliman has prepared this report for Oregon Trail Library District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Oregon Trail Library District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Oregon Trail Library District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(1.04%)	(1.04%)	(1.04%)	(1.04%)	(1.04%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.84%**	**17.84%**	**18.76%**	**9.40%**	**13.50%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.40%**	**18.40%**	**19.32%**	**9.88%**	**13.98%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.32%	10.32%	18.92%	9.69%	12.40%
July 1, 2013 to June 30, 2015	10.11%	10.11%	19.42%	10.60%	13.33%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Oregon Trail Library District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$109,679	$151,617
Allocated pre-SLGRP pooled liability/(surplus)	(21,226)	(19,407)
Transition liability/(surplus)	(12,588)	(12,655)
Allocated pooled OPSRP UAL	7,550	1,623
Side account	0	0
Net unfunded pension actuarial accrued liability	83,415	121,178
Combined valuation payroll	107,122	95,108
Net pension UAL as a percentage of payroll	78%	127%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(1.04%)	(1.14%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,247	$2,464
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$44,099	$6,968	5.78%	$42,838	$2,476
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**44,099**	**6,968**		**42,838**	**2,476**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$44,099**	**$6,968**		**$42,838**	**$2,476**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($12,655)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.92%)
B. Actual employer payroll	53,663
C. Payment to transition liability/(surplus)	(494)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.92%)
B. Actual employer payroll	54,845
C. Payment to transition liability/(surplus)	(505)
4. Supplemental payment to transition liability	0
5. Interest	(932)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($12,588)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(12,588)	(12,655)
2. Combined valuation payroll	107,122	95,108
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.04%)**	**(1.14%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	107,122	95,108
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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503 227 0634

December 2013

Oregon School Boards Association/2531
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Oregon School Boards Association/2531

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Oregon School Boards Association/2531

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Oregon School Boards Association -- #2531

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Oregon School Boards Association to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Oregon School Boards Association.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Oregon School Boards Association

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.58%	14.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.12%	0.12%	0.12%	0.12%	0.12%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**19.54%**	**19.54%**	**21.68%**	**12.32%**	**16.42%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.10%**	**20.10%**	**22.24%**	**12.80%**	**16.90%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.36%	13.36%	21.64%	12.41%	15.12%
July 1, 2013 to June 30, 2015	13.50%	13.50%	21.30%	12.48%	15.21%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Oregon School Boards Association

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,293,982	$3,951,550
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	29,268	29,489
Allocated pooled OPSRP UAL	157,917	42,294
Side account	0	0
Net unfunded pension actuarial accrued liability	2,481,167	4,023,333
Combined valuation payroll	2,240,503	2,478,779
Net pension UAL as a percentage of payroll	111%	162%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.12%	0.10%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$47,007	$64,214
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$999,776	$157,965	5.78%	$1,113,147	$64,340
Tier 2 General Service	10.58%	306,415	32,419	10.42%	539,535	56,220
Total General Service		**1,306,191**	**190,384**		**1,652,682**	**120,560**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$1,306,191**	**$190,384**		**$1,652,682**	**$120,560**
Employer normal cost rate						
General Service			**14.58%**			**7.29%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.58%**			**7.29%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$29,489
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.10%
B. Actual employer payroll	1,154,663
C. Payment to transition liability/(surplus)	1,155
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.10%
B. Actual employer payroll	1,234,621
C. Payment to transition liability/(surplus)	1,234
4. Supplemental payment to transition liability	0
5. Interest	2,168
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$29,268**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	29,268	29,489
2. Combined valuation payroll	2,240,503	2,478,779
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.12%**	**0.10%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,240,503	2,478,779
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Oregon Health & Science University/2880
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Oregon Health & Science University/2880

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Oregon Health & Science University/2880

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Oregon Health & Science University -- #2880

December 2013

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Executive Summary

Milliman has prepared this report for Oregon Health & Science University to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Oregon Health & Science University.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Oregon Health & Science University

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.45%	13.45%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.40%)	(5.40%)	(5.40%)	(5.40%)	(5.40%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**12.89%**	**12.89%**	**16.16%**	**6.80%**	**10.90%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**13.45%**	**13.45%**	**16.72%**	**7.28%**	**11.38%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.53%	8.53%	16.31%	7.08%	9.79%
July 1, 2013 to June 30, 2015	8.88%	8.88%	16.12%	7.30%	10.03%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Oregon Health & Science University

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$392,854,391	$640,379,243
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(233,689,033)	(237,098,314)
Allocated pooled OPSRP UAL	27,043,947	6,854,046
Side account	0	0
Net unfunded pension actuarial accrued liability	186,209,305	410,134,975
Combined valuation payroll	383,695,958	401,705,334
Net pension UAL as a percentage of payroll	49%	102%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.40%)	(5.08%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,050,104	$10,406,379
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$130,773,183	$20,662,163	5.78%	$141,564,704	$8,182,440
Tier 2 General Service	10.58%	107,398,391	11,362,750	10.42%	114,146,113	11,894,025
Total General Service		**238,171,574**	**32,024,913**		**255,710,817**	**20,076,465**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$238,171,574**	**$32,024,913**		**$255,710,817**	**$20,076,465**
Employer normal cost rate						
General Service			**13.45%**			**7.85%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.45%**			**7.85%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($237,098,314)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.23%)
B. Actual employer payroll	201,920,029
C. Payment to transition liability/(surplus)	(10,560,418)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.23%)
B. Actual employer payroll	194,247,856
C. Payment to transition liability/(surplus)	(10,159,162)
4. Supplemental payment to transition liability	0
5. Interest	(17,310,299)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($233,689,033)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(233,689,033)	(237,098,314)
2. Combined valuation payroll	383,695,958	401,705,334
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.40%)**	**(5.08%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	383,695,958	401,705,334
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Oregon Coast Community College/2995
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Oregon Coast Community College/2995

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Oregon Coast Community College/2995

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

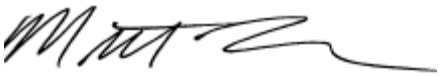
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

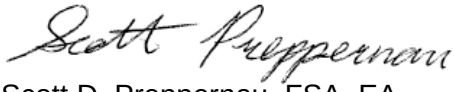
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Oregon Coast Community College -- #2995

December 2013

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Executive Summary

Milliman has prepared this report for Oregon Coast Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Oregon Coast Community College.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Oregon Coast Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(8.66%)	(8.66%)	(8.66%)	(8.66%)	(8.66%)
Net pension contribution rate	**11.18%**	**11.18%**	**14.75%**	**5.39%**	**9.49%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.74%**	**11.74%**	**15.31%**	**5.87%**	**9.97%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.25%	9.25%	16.91%	7.68%	10.39%
July 1, 2013 to June 30, 2015	9.67%	9.67%	16.69%	7.87%	10.60%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Oregon Coast Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,904,841	$3,727,688
Allocated pre-SLGRP pooled liability/(surplus)	387,883	506,626
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	131,129	39,898
Side account	1,815,717	1,730,624
Net unfunded pension actuarial accrued liability	608,136	2,543,588
Combined valuation payroll	1,860,434	2,338,352
Net pension UAL as a percentage of payroll	33%	109%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(8.66%)	(6.37%)
Allocated pooled RHIA UAL	$39,033	$60,576
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$1,730,624**	**$1,730,624**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(155,651)	(155,651)
5. Side account earnings during 2012		241,744	241,744
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$1,815,717**	**$1,815,717**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$1,815,717	$1,730,624
Side Account 2	0	0
Side Account 3	0	0
Total	**$1,815,717**	**$1,730,624**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$1,815,717	$1,730,624
2. Combined valuation payroll	1,860,434	2,338,352
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(8.66%)	(6.37%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Odell Sanitary District/2816
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Odell Sanitary District/2816

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Odell Sanitary District/2816

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Odell Sanitary District -- #2816

December 2013

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Executive Summary

Milliman has prepared this report for Odell Sanitary District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Odell Sanitary District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Odell Sanitary District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(1.16%)	(1.16%)	(1.16%)	(1.16%)	(1.16%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.26%**	**14.26%**	**20.40%**	**11.04%**	**15.14%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.82%**	**14.82%**	**20.96%**	**11.52%**	**15.62%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.42%	11.42%	16.89%	7.66%	10.37%
July 1, 2013 to June 30, 2015	14.94%	14.94%	19.61%	10.79%	13.52%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Odell Sanitary District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$208,186	$305,718
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(26,550)	(35,372)
Allocated pooled OPSRP UAL	14,331	3,272
Side account	0	0
Net unfunded pension actuarial accrued liability	195,967	273,618
Combined valuation payroll	203,333	191,775
Net pension UAL as a percentage of payroll	96%	143%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(1.16%)	(1.59%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,266	$4,968
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	40,777	4,314	10.42%	35,809	3,731
Total General Service		**40,777**	**4,314**		**35,809**	**3,731**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$40,777**	**$4,314**		**$35,809**	**$3,731**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($35,372)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.65%)
B. Actual employer payroll	111,669
C. Payment to transition liability/(surplus)	(5,193)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.65%)
B. Actual employer payroll	120,369
C. Payment to transition liability/(surplus)	(5,596)
4. Supplemental payment to transition liability	0
5. Interest	(1,967)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($26,550)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(26,550)	(35,372)
2. Combined valuation payroll	203,333	191,775
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(1.16%)**	**(1.59%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	203,333	191,775
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Odell Rural Fire Protection District/2562
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Odell Rural Fire Protection District/2562

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Odell Rural Fire Protection District/2562

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Odell Rural Fire Protection District -- #2562

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Odell Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Odell Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Odell Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	2.03%	2.03%	2.03%	2.03%	2.03%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.81%**	**18.45%**	**20.81%**	**12.47%**	**16.57%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.37%**	**19.01%**	**21.37%**	**12.95%**	**17.05%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.23%	14.92%	22.70%	13.47%	16.18%
July 1, 2013 to June 30, 2015	16.01%	14.78%	21.95%	13.13%	15.86%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Odell Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$97,448	$124,368
Allocated pre-SLGRP pooled liability/(surplus)	(18,859)	(15,919)
Transition liability/(surplus)	21,820	22,792
Allocated pooled OPSRP UAL	6,708	1,331
Side account	0	0
Net unfunded pension actuarial accrued liability	107,117	132,572
Combined valuation payroll	95,176	78,015
Net pension UAL as a percentage of payroll	113%	170%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	2.03%	2.51%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,997	$2,021
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	22,365	3,511	15.12%	0	0
Total Police & Fire		**22,365**	**3,511**		**0**	**0**
Total		**$22,365**	**$3,511**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.09%**
Aggregate (Default)			**15.70%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$22,792
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.86%
B. Actual employer payroll	38,339
C. Payment to transition liability/(surplus)	1,097
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.86%
B. Actual employer payroll	52,150
C. Payment to transition liability/(surplus)	1,491
4. Supplemental payment to transition liability	0
5. Interest	1,616
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$21,820**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	21,820	22,792
2. Combined valuation payroll	95,176	78,015
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.03%**	**2.51%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	95,176	78,015
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Ochoco Irrigation District/2852
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Ochoco Irrigation District/2852

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Ochoco Irrigation District/2852

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Ochoco Irrigation District -- #2852

December 2013

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Executive Summary

Milliman has prepared this report for Ochoco Irrigation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Ochoco Irrigation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Ochoco Irrigation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(5.52%)	(5.52%)	(5.52%)	(5.52%)	(5.52%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**8.14%**	**8.14%**	**14.28%**	**4.92%**	**9.02%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**8.70%**	**8.70%**	**14.84%**	**5.40%**	**9.50%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	8.46%	8.46%	13.93%	4.70%	7.41%
July 1, 2013 to June 30, 2015	9.30%	9.30%	13.97%	5.15%	7.88%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Ochoco Irrigation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$426,341	$659,458
Allocated pre-SLGRP pooled liability/(surplus)	(82,509)	(84,412)
Transition liability/(surplus)	(258,881)	(263,193)
Allocated pooled OPSRP UAL	29,349	7,058
Side account	0	0
Net unfunded pension actuarial accrued liability	114,300	318,911
Combined valuation payroll	416,402	413,673
Net pension UAL as a percentage of payroll	27%	77%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(5.52%)	(5.47%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,736	$10,716
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	347,319	36,746	10.42%	346,022	36,055
Total General Service		**347,319**	**36,746**		**346,022**	**36,055**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$347,319**	**$36,746**		**$346,022**	**$36,055**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($263,193)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.91%)
B. Actual employer payroll	199,029
C. Payment to transition liability/(surplus)	(11,763)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.91%)
B. Actual employer payroll	198,404
C. Payment to transition liability/(surplus)	(11,725)
4. Supplemental payment to transition liability	0
5. Interest	(19,176)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($258,881)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(258,881)	(263,193)
2. Combined valuation payroll	416,402	413,673
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.52%)**	**(5.47%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	416,402	413,673
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Oak Lodge Water District/2504
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Oak Lodge Water District/2504

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Oak Lodge Water District/2504

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Oak Lodge Water District -- #2504

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Oak Lodge Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Oak Lodge Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Oak Lodge Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.77%	13.77%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	2.00%	2.00%	2.00%	2.00%	2.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.61%**	**20.61%**	**23.56%**	**14.20%**	**18.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**21.17%**	**21.17%**	**24.12%**	**14.68%**	**18.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.57%	15.57%	23.58%	14.35%	17.06%
July 1, 2013 to June 30, 2015	15.70%	15.70%	23.22%	14.40%	17.13%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Oak Lodge Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$930,530	$1,409,386
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	204,717	207,627
Allocated pooled OPSRP UAL	64,057	15,085
Side account	0	0
Net unfunded pension actuarial accrued liability	1,199,304	1,632,098
Combined valuation payroll	908,837	884,098
Net pension UAL as a percentage of payroll	132%	185%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	2.00%	2.02%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,068	$22,903
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$431,798	$68,224	5.78%	$426,890	$24,674
Tier 2 General Service	10.58%	274,780	29,072	10.42%	268,614	27,990
Total General Service		**706,578**	**97,296**		**695,504**	**52,664**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$706,578**	**$97,296**		**$695,504**	**$52,664**
Employer normal cost rate						
General Service			**13.77%**			**7.57%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.77%**			**7.57%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$207,627
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.04%
B. Actual employer payroll	443,760
C. Payment to transition liability/(surplus)	9,053
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.04%
B. Actual employer payroll	442,238
C. Payment to transition liability/(surplus)	9,021
4. Supplemental payment to transition liability	0
5. Interest	15,164
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$204,717**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	204,717	207,627
2. Combined valuation payroll	908,837	884,098
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**2.00%**	**2.02%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	908,837	884,098
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Northern Oregon Corrections/2825
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Northern Oregon Corrections/2825

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Northern Oregon Corrections/2825

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Northern Oregon Corrections -- #2825

December 2013

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Executive Summary

Milliman has prepared this report for Northern Oregon Corrections to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Northern Oregon Corrections.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Northern Oregon Corrections

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.35%	11.94%	16.47%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.62%)	(9.62%)	(9.62%)	(9.62%)	(9.62%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.57%**	**7.16%**	**11.69%**	**2.58%**	**6.68%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.13%**	**7.72%**	**12.25%**	**3.06%**	**7.16%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	9.38%	5.53%	11.92%	2.79%	5.50%
July 1, 2013 to June 30, 2015	8.49%	5.50%	11.30%	2.47%	5.20%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Northern Oregon Corrections

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$2,974,978	$4,189,423
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(3,152,375)	(3,202,461)
Allocated pooled OPSRP UAL	204,796	44,840
Side account	0	0
Net unfunded pension actuarial accrued liability	27,399	1,031,802
Combined valuation payroll	2,905,624	2,627,995
Net pension UAL as a percentage of payroll	1%	39%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.62%)	(10.48%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$60,961	$68,080
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$185,178	$29,258	5.78%	$182,018	$10,521
Tier 2 General Service	10.58%	527,357	55,794	10.42%	575,293	59,946
Total General Service		**712,535**	**85,052**		**757,311**	**70,467**
Tier 1 Police & Fire	17.89%	285,670	51,106	15.06%	252,273	37,992
Tier 2 Police & Fire	15.70%	525,032	82,430	15.12%	550,375	83,217
Total Police & Fire		**810,702**	**133,536**		**802,648**	**121,209**
Total		**$1,523,237**	**$218,588**		**$1,559,959**	**$191,676**
Employer normal cost rate						
General Service			**11.94%**			**9.30%**
Police & Fire			**16.47%**			**15.10%**
Aggregate (Default)			**14.35%**			**12.29%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($3,202,461)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(9.52%)
B. Actual employer payroll	1,436,879
C. Payment to transition liability/(surplus)	(136,791)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(9.52%)
B. Actual employer payroll	1,542,059
C. Payment to transition liability/(surplus)	(146,804)
4. Supplemental payment to transition liability	0
5. Interest	(233,509)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($3,152,375)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(3,152,375)	(3,202,461)
2. Combined valuation payroll	2,905,624	2,627,995
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.62%)**	**(10.48%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	2,905,624	2,627,995
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

North Wasco County Parks And Recreation District/2792
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
North Wasco County Parks And Recreation District/2792

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
North Wasco County Parks And Recreation District/2792

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

North Wasco County Parks And Recreation District -- #2792

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for North Wasco County Parks And Recreation District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to North Wasco County Parks And Recreation District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for North Wasco County Parks And Recreation District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.88%**	**18.88%**	**19.80%**	**10.44%**	**14.54%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.44%**	**19.44%**	**20.36%**	**10.92%**	**15.02%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.28%	10.28%	19.84%	10.61%	13.32%
July 1, 2013 to June 30, 2015	10.29%	10.29%	19.60%	10.78%	13.51%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

North Wasco County Parks And Recreation District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$338,710	$488,024
Allocated pre-SLGRP pooled liability/(surplus)	(65,550)	(62,468)
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	23,317	5,223
Side account	0	0
Net unfunded pension actuarial accrued liability	296,477	430,779
Combined valuation payroll	330,814	306,134
Net pension UAL as a percentage of payroll	90%	141%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.00%	0.00%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,941	$7,931
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$174,661	$27,596	5.78%	$168,782	$9,756
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**174,661**	**27,596**		**168,782**	**9,756**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$174,661**	**$27,596**		**$168,782**	**$9,756**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	330,814	306,134
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	330,814	306,134
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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503 227 0634

December 2013

North Morrow Vector Control District/2839
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
North Morrow Vector Control District/2839

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
North Morrow Vector Control District/2839

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

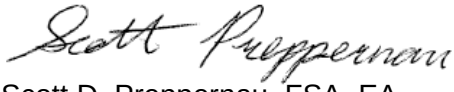
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

North Morrow Vector Control District -- #2839

December 2013

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Executive Summary

Milliman has prepared this report for North Morrow Vector Control District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to North Morrow Vector Control District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for North Morrow Vector Control District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.13%	0.13%	0.13%	0.13%	0.13%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.79%**	**13.79%**	**19.93%**	**10.57%**	**14.67%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.35%**	**14.35%**	**20.49%**	**11.05%**	**15.15%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.51%	14.51%	19.98%	10.75%	13.46%
July 1, 2013 to June 30, 2015	14.91%	14.91%	19.58%	10.76%	13.49%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

North Morrow Vector Control District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$108,055	$160,684
Allocated pre-SLGRP pooled liability/(surplus)	(20,912)	(20,568)
Transition liability/(surplus)	1,588	1,612
Allocated pooled OPSRP UAL	7,438	1,720
Side account	0	0
Net unfunded pension actuarial accrued liability	96,169	143,448
Combined valuation payroll	105,536	100,796
Net pension UAL as a percentage of payroll	91%	142%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.13%	0.14%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,214	$2,611
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	105,536	11,166	10.42%	100,796	10,503
Total General Service		**105,536**	**11,166**		**100,796**	**10,503**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$105,536**	**$11,166**		**$100,796**	**$10,503**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$1,612
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.14%
B. Actual employer payroll	49,339
C. Payment to transition liability/(surplus)	69
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.14%
B. Actual employer payroll	52,108
C. Payment to transition liability/(surplus)	73
4. Supplemental payment to transition liability	0
5. Interest	118
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$1,588**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	1,588	1,612
2. Combined valuation payroll	105,536	100,796
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.13%**	**0.14%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	105,536	100,796
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

North Lincoln Fire & Rescue District #1/2793
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
North Lincoln Fire & Rescue District #1/2793

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
North Lincoln Fire & Rescue District #1/2793

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

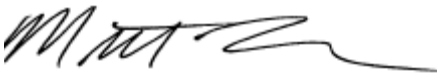
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

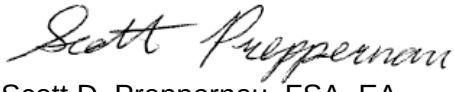
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

North Lincoln Fire & Rescue District #1 -- #2793

December 2013

Secondary Employers

2711 Devils Lake Rural Fire Protection District

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for North Lincoln Fire & Rescue District #1 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to North Lincoln Fire & Rescue District #1.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for North Lincoln Fire & Rescue District #1

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.43%	13.34%	16.43%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.11%)	(5.11%)	(5.11%)	(5.11%)	(5.11%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**16.16%**	**13.07%**	**16.16%**	**7.09%**	**11.19%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.72%**	**13.63%**	**16.72%**	**7.57%**	**11.67%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	15.03%	10.31%	15.68%	6.55%	9.26%
July 1, 2013 to June 30, 2015	15.94%	11.78%	16.46%	7.63%	10.36%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

North Lincoln Fire & Rescue District #1

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$429,618	$695,889
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(241,766)	(249,545)
Allocated pooled OPSRP UAL	29,575	7,448
Side account	0	0
Net unfunded pension actuarial accrued liability	217,427	453,792
Combined valuation payroll	419,603	436,526
Net pension UAL as a percentage of payroll	52%	104%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.11%)	(4.92%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,803	$11,308
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	39,657	4,132
Total General Service		**0**	**0**		**39,657**	**4,132**
Tier 1 Police & Fire	17.89%	110,425	19,755	15.06%	107,707	16,221
Tier 2 Police & Fire	15.70%	221,453	34,768	15.12%	206,555	31,231
Total Police & Fire		**331,878**	**54,523**		**314,262**	**47,452**
Total		**$331,878**	**$54,523**		**$353,919**	**$51,584**
Employer normal cost rate						
General Service			**13.34%**			**10.42%**
Police & Fire			**16.43%**			**15.10%**
Aggregate (Default)			**16.43%**			**14.58%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($249,545)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(5.76%)
B. Actual employer payroll	212,748
C. Payment to transition liability/(surplus)	(12,254)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(5.76%)
B. Actual employer payroll	233,236
C. Payment to transition liability/(surplus)	(13,434)
4. Supplemental payment to transition liability	0
5. Interest	(17,909)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($241,766)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(241,766)	(249,545)
2. Combined valuation payroll	419,603	436,526
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.11%)**	**(4.92%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	419,603	436,526
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

North Douglas County Fire and EMS/2638
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
North Douglas County Fire and EMS/2638

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
North Douglas County Fire and EMS/2638

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

North Douglas County Fire and EMS -- #2638

December 2013

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Executive Summary

Milliman has prepared this report for North Douglas County Fire and EMS to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to North Douglas County Fire and EMS.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for North Douglas County Fire and EMS

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.84%	10.54%	15.88%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(5.91%)	(5.91%)	(5.91%)	(5.91%)	(5.91%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.77%**	**9.47%**	**14.81%**	**6.29%**	**10.39%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**15.33%**	**10.03%**	**15.37%**	**6.77%**	**10.87%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.36%	9.43%	14.36%	5.36%	8.07%
July 1, 2013 to June 30, 2015	17.44%	12.70%	17.46%	8.61%	11.34%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

North Douglas County Fire and EMS

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$225,183	$522,887
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(146,446)	(150,277)
Allocated pooled OPSRP UAL	15,501	5,597
Side account	0	0
Net unfunded pension actuarial accrued liability	94,238	378,207
Combined valuation payroll	219,933	328,003
Net pension UAL as a percentage of payroll	43%	115%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(5.91%)	(3.94%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,614	$8,497
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	588	62	10.42%	309	32
Total General Service		**588**	**62**		**309**	**32**
Tier 1 Police & Fire	17.89%	6,692	1,197	15.06%	5,479	825
Tier 2 Police & Fire	15.70%	76,800	12,058	15.12%	73,753	11,151
Total Police & Fire		**83,492**	**13,255**		**79,232**	**11,976**
Total		**$84,080**	**$13,317**		**$79,541**	**$12,008**
Employer normal cost rate						
General Service			**10.54%**			**10.36%**
Police & Fire			**15.88%**			**15.12%**
Aggregate (Default)			**15.84%**			**15.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($150,277)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.95%)
B. Actual employer payroll	104,504
C. Payment to transition liability/(surplus)	(7,263)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.95%)
B. Actual employer payroll	106,704
C. Payment to transition liability/(surplus)	(7,416)
4. Supplemental payment to transition liability	0
5. Interest	(10,848)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($146,446)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(146,446)	(150,277)
2. Combined valuation payroll	219,933	328,003
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(5.91%)**	**(3.94%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	219,933	328,003
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

North Bend/Coos-Curry Housing Authority/2781
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
North Bend/Coos-Curry Housing Authority/2781

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
North Bend/Coos-Curry Housing Authority/2781

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

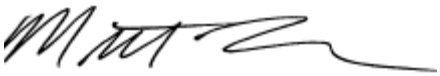
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

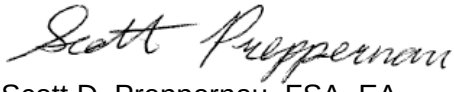
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

North Bend/Coos-Curry Housing Authority -- #2781

December 2013

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Executive Summary

Milliman has prepared this report for North Bend/Coos-Curry Housing Authority to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to North Bend/Coos-Curry Housing Authority.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for North Bend/Coos-Curry Housing Authority

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.18%	14.18%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	16.33%	16.33%	16.33%	16.33%	16.33%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**33.59%**	**33.59%**	**36.13%**	**26.77%**	**30.87%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**34.15%**	**34.15%**	**36.69%**	**27.25%**	**31.35%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	27.30%	27.30%	34.77%	25.54%	28.25%
July 1, 2013 to June 30, 2015	27.05%	27.05%	34.75%	25.93%	28.66%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

North Bend/Coos-Curry Housing Authority

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$620,248	$1,054,442
Allocated pre-SLGRP pooled liability/(surplus)	(120,035)	(134,970)
Transition liability/(surplus)	1,115,283	1,128,049
Allocated pooled OPSRP UAL	42,698	11,286
Side account	0	0
Net unfunded pension actuarial accrued liability	1,658,194	2,058,807
Combined valuation payroll	605,788	661,444
Net pension UAL as a percentage of payroll	274%	311%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	16.33%	14.67%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$12,710	$17,135
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$97,566	$15,415	5.78%	$141,095	$8,155
Tier 2 General Service	10.58%	43,912	4,646	10.42%	74,764	7,790
Total General Service		**141,478**	**20,061**		**215,859**	**15,945**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$141,478**	**$20,061**		**$215,859**	**$15,945**
Employer normal cost rate						
General Service			**14.18%**			**7.39%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**14.18%**			**7.39%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$1,128,049
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	14.93%
B. Actual employer payroll	339,553
C. Payment to transition liability/(surplus)	50,695
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	14.93%
B. Actual employer payroll	299,290
C. Payment to transition liability/(surplus)	44,685
4. Supplemental payment to transition liability	0
5. Interest	82,614
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$1,115,283**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	1,115,283	1,128,049
2. Combined valuation payroll	605,788	661,444
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**16.33%**	**14.67%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	605,788	661,444
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

NORCOM/2837
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
NORCOM/2837

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
NORCOM/2837

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

NORCOM -- #2837

December 2013

Secondary Employers

2775 Silver Falls 9-1-1

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Executive Summary

Milliman has prepared this report for NORCOM to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to NORCOM.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for NORCOM

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.74%	12.74%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(6.54%)	(6.54%)	(6.54%)	(6.54%)	(6.54%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.04%**	**11.04%**	**15.02%**	**5.66%**	**9.76%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**11.60%**	**11.60%**	**15.58%**	**6.14%**	**10.24%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	7.59%	7.59%	14.76%	5.53%	8.24%
July 1, 2013 to June 30, 2015	7.80%	7.80%	14.47%	5.65%	8.38%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

NORCOM

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$947,269	$1,415,041
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(682,193)	(694,823)
Allocated pooled OPSRP UAL	65,210	15,145
Side account	0	0
Net unfunded pension actuarial accrued liability	330,286	735,363
Combined valuation payroll	925,186	887,645
Net pension UAL as a percentage of payroll	36%	83%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(6.54%)	(6.73%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$19,411	$22,995
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$157,935	$24,954	5.78%	$154,107	$8,907
Tier 2 General Service	10.58%	223,283	23,623	10.42%	203,701	21,226
Total General Service		**381,218**	**48,577**		**357,808**	**30,133**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$381,218**	**$48,577**		**$357,808**	**$30,133**
Employer normal cost rate						
General Service			**12.74%**			**8.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.74%**			**8.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($694,823)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.78%)
B. Actual employer payroll	453,556
C. Payment to transition liability/(surplus)	(30,751)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.78%)
B. Actual employer payroll	478,052
C. Payment to transition liability/(surplus)	(32,412)
4. Supplemental payment to transition liability	0
5. Interest	(50,533)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($682,193)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(682,193)	(694,823)
2. Combined valuation payroll	925,186	887,645
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(6.54%)**	**(6.73%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	925,186	887,645
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Netarts-Oceanside Sanitary District/2604
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Netarts-Oceanside Sanitary District/2604

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Netarts-Oceanside Sanitary District/2604

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Netarts-Oceanside Sanitary District -- #2604

December 2013

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Executive Summary

Milliman has prepared this report for Netarts-Oceanside Sanitary District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Netarts-Oceanside Sanitary District.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Netarts-Oceanside Sanitary District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.18%	12.18%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(9.15%)	(9.15%)	(9.15%)	(9.15%)	(9.15%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**7.87%**	**7.87%**	**12.41%**	**3.05%**	**7.15%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**8.43%**	**8.43%**	**12.97%**	**3.53%**	**7.63%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	6.65%	6.65%	13.35%	4.12%	6.83%
July 1, 2013 to June 30, 2015	5.94%	5.94%	12.02%	3.20%	5.93%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Netarts-Oceanside Sanitary District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$313,387	$472,543
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(315,648)	(316,524)
Allocated pooled OPSRP UAL	21,573	5,058
Side account	0	0
Net unfunded pension actuarial accrued liability	19,312	161,077
Combined valuation payroll	306,081	296,423
Net pension UAL as a percentage of payroll	6%	54%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(9.15%)	(9.18%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,422	$7,679
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$53,091	$8,388	5.78%	$50,035	$2,892
Tier 2 General Service	10.58%	120,354	12,733	10.42%	114,924	11,975
Total General Service		**173,445**	**21,121**		**164,959**	**14,867**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$173,445**	**$21,121**		**$164,959**	**$14,867**
Employer normal cost rate						
General Service			**12.18%**			**9.01%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.18%**			**9.01%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($316,524)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.19%)
B. Actual employer payroll	146,458
C. Payment to transition liability/(surplus)	(11,995)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.19%)
B. Actual employer payroll	149,717
C. Payment to transition liability/(surplus)	(12,262)
4. Supplemental payment to transition liability	0
5. Interest	(23,381)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($315,648)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(315,648)	(316,524)
2. Combined valuation payroll	306,081	296,423
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.15%)**	**(9.18%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	306,081	296,423
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Netarts-Oceanside Rural Fire Protection District/2830
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Netarts-Oceanside Rural Fire Protection District/2830

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Netarts-Oceanside Rural Fire Protection District/2830

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Netarts-Oceanside Rural Fire Protection District -- #2830

December 2013

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Executive Summary

Milliman has prepared this report for Netarts-Oceanside Rural Fire Protection District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Netarts-Oceanside Rural Fire Protection District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Netarts-Oceanside Rural Fire Protection District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.53%)	(0.53%)	(0.53%)	(0.53%)	(0.53%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.25%**	**15.89%**	**18.25%**	**9.91%**	**14.01%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**18.81%**	**16.45%**	**18.81%**	**10.39%**	**14.49%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	19.06%	11.70%	19.06%	10.25%	12.96%
July 1, 2013 to June 30, 2015	19.10%	11.90%	19.10%	10.25%	12.98%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Netarts-Oceanside Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$106,000	$225,510
Allocated pre-SLGRP pooled liability/(surplus)	(20,514)	(28,866)
Transition liability/(surplus)	(6,137)	(6,129)
Allocated pooled OPSRP UAL	7,297	2,414
Side account	0	0
Net unfunded pension actuarial accrued liability	86,646	192,929
Combined valuation payroll	103,529	141,461
Net pension UAL as a percentage of payroll	84%	136%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.53%)	(0.37%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,172	$3,665
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	61,348	9,632	15.12%	100,088	15,133
Total Police & Fire		**61,348**	**9,632**		**100,088**	**15,133**
Total		**$61,348**	**$9,632**		**$100,088**	**$15,133**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($6,129)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.36%)
B. Actual employer payroll	68,637
C. Payment to transition liability/(surplus)	(247)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.36%)
B. Actual employer payroll	55,556
C. Payment to transition liability/(surplus)	(200)
4. Supplemental payment to transition liability	0
5. Interest	(455)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($6,137)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(6,137)	(6,129)
2. Combined valuation payroll	103,529	141,461
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.53%)**	**(0.37%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	103,529	141,461
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Netarts Water District/2818
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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Milliman

December 2013
Netarts Water District/2818

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Netarts Water District/2818

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No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Netarts Water District -- #2818

December 2013

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Executive Summary

Milliman has prepared this report for Netarts Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Netarts Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Netarts Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.04%)	(2.04%)	(2.04%)	(2.04%)	(2.04%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.62%**	**11.62%**	**17.76%**	**8.40%**	**12.50%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.18%**	**12.18%**	**18.32%**	**8.88%**	**12.98%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.45%	12.45%	17.92%	8.69%	11.40%
July 1, 2013 to June 30, 2015	12.74%	12.74%	17.41%	8.59%	11.32%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Netarts Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$124,013	$189,208
Allocated pre-SLGRP pooled liability/(surplus)	(24,000)	(24,219)
Transition liability/(surplus)	(27,784)	(28,059)
Allocated pooled OPSRP UAL	8,537	2,025
Side account	0	0
Net unfunded pension actuarial accrued liability	80,766	138,955
Combined valuation payroll	121,122	118,689
Net pension UAL as a percentage of payroll	67%	117%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.04%)	(2.03%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,541	$3,075
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	121,122	12,815	10.42%	118,689	12,367
Total General Service		**121,122**	**12,815**		**118,689**	**12,367**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$121,122**	**$12,815**		**$118,689**	**$12,367**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($28,059)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.92%)
B. Actual employer payroll	58,929
C. Payment to transition liability/(surplus)	(1,131)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.92%)
B. Actual employer payroll	62,583
C. Payment to transition liability/(surplus)	(1,202)
4. Supplemental payment to transition liability	0
5. Interest	(2,058)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($27,784)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(27,784)	(28,059)
2. Combined valuation payroll	121,122	118,689
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.04%)**	**(2.03%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	121,122	118,689
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Nestucca Rural Fire District/2674
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Nestucca Rural Fire District/2674

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Nestucca Rural Fire District/2674

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

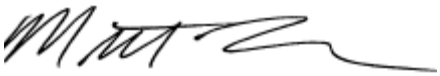
No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

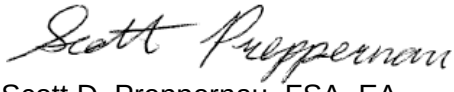
On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,



Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary



Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Nestucca Rural Fire District -- #2674

December 2013

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Executive Summary

Milliman has prepared this report for Nestucca Rural Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Nestucca Rural Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Nestucca Rural Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(9.09%)	(9.09%)	(9.09%)	(9.09%)	(9.09%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**9.69%**	**7.33%**	**9.69%**	**1.35%**	**5.45%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**10.25%**	**7.89%**	**10.25%**	**1.83%**	**5.93%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.45%	5.09%	12.45%	3.64%	6.35%
July 1, 2013 to June 30, 2015	12.46%	5.26%	12.46%	3.61%	6.34%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Nestucca Rural Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$184,558	$362,690
Allocated pre-SLGRP pooled liability/(surplus)	(35,717)	(46,425)
Transition liability/(surplus)	(184,766)	(185,464)
Allocated pooled OPSRP UAL	12,705	3,882
Side account	0	0
Net unfunded pension actuarial accrued liability	(23,220)	134,683
Combined valuation payroll	180,255	227,513
Net pension UAL as a percentage of payroll	(13%)	59%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(9.09%)	(7.01%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,782	$5,894
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	52,485	8,240	15.12%	56,005	8,468
Total Police & Fire		**52,485**	**8,240**		**56,005**	**8,468**
Total		**$52,485**	**$8,240**		**$56,005**	**$8,468**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($185,464)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(6.97%)
B. Actual employer payroll	105,813
C. Payment to transition liability/(surplus)	(7,375)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(6.97%)
B. Actual employer payroll	100,554
C. Payment to transition liability/(surplus)	(7,009)
4. Supplemental payment to transition liability	0
5. Interest	(13,686)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($184,766)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(184,766)	(185,464)
2. Combined valuation payroll	180,255	227,513
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(9.09%)**	**(7.01%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	180,255	227,513
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Neskowin Water District/2716
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Neskowin Water District/2716

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Neskowin Water District/2716

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Neskowin Water District -- #2716

December 2013

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Executive Summary

Milliman has prepared this report for Neskowin Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Neskowin Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Neskowin Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.02%)	(0.02%)	(0.02%)	(0.02%)	(0.02%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**18.86%**	**18.86%**	**19.78%**	**10.42%**	**14.52%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**19.42%**	**19.42%**	**20.34%**	**10.90%**	**15.00%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.25%	10.25%	19.81%	10.58%	13.29%
July 1, 2013 to June 30, 2015	10.27%	10.27%	19.58%	10.76%	13.49%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Neskowin Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$193,919	$301,665
Allocated pre-SLGRP pooled liability/(surplus)	(37,529)	(38,614)
Transition liability/(surplus)	(484)	(503)
Allocated pooled OPSRP UAL	13,349	3,229
Side account	0	0
Net unfunded pension actuarial accrued liability	169,255	265,777
Combined valuation payroll	189,398	189,232
Net pension UAL as a percentage of payroll	89%	140%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.02%)	(0.02%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,974	$4,902
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$102,807	$16,244	5.78%	$104,825	$6,059
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**102,807**	**16,244**		**104,825**	**6,059**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$102,807**	**$16,244**		**$104,825**	**$6,059**
Employer normal cost rate						
General Service			**15.80%**			**5.78%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**5.78%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($503)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.03%)
B. Actual employer payroll	88,245
C. Payment to transition liability/(surplus)	(26)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.03%)
B. Actual employer payroll	92,742
C. Payment to transition liability/(surplus)	(29)
4. Supplemental payment to transition liability	0
5. Interest	(36)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($484)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(484)	(503)
2. Combined valuation payroll	189,398	189,232
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.02%)**	**(0.02%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	189,398	189,232
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Nesika Beach-Ophir Water District/2858
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Nesika Beach-Ophir Water District/2858

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Nesika Beach-Ophir Water District/2858

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Nesika Beach-Ophir Water District -- #2858

December 2013

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Executive Summary

Milliman has prepared this report for Nesika Beach-Ophir Water District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Nesika Beach-Ophir Water District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Nesika Beach-Ophir Water District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.80%	15.80%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(3.43%)	(3.43%)	(3.43%)	(3.43%)	(3.43%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**17.21%**	**17.21%**	**18.13%**	**8.77%**	**12.87%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**17.77%**	**17.77%**	**18.69%**	**9.25%**	**13.35%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	10.41%	9.10%	16.88%	7.65%	10.36%
July 1, 2013 to June 30, 2015	10.98%	9.75%	16.92%	8.10%	10.83%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Nesika Beach-Ophir Water District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$91,343	$114,132
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(34,453)	(35,607)
Allocated pooled OPSRP UAL	6,288	1,222
Side account	0	0
Net unfunded pension actuarial accrued liability	63,178	79,747
Combined valuation payroll	89,214	71,594
Net pension UAL as a percentage of payroll	71%	111%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(3.43%)	(4.28%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,872	$1,855
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$56,652	$8,951	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**56,652**	**8,951**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$56,652**	**$8,951**		**$0**	**$0**
Employer normal cost rate						
General Service			**15.80%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**15.80%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($35,607)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(4.66%)
B. Actual employer payroll	40,028
C. Payment to transition liability/(surplus)	(1,865)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(4.66%)
B. Actual employer payroll	39,502
C. Payment to transition liability/(surplus)	(1,841)
4. Supplemental payment to transition liability	0
5. Interest	(2,552)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($34,453)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(34,453)	(35,607)
2. Combined valuation payroll	89,214	71,594
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(3.43%)**	**(4.28%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	89,214	71,594
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Nehalem Bay Health District/2780
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Nehalem Bay Health District/2780

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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December 2013
Nehalem Bay Health District/2780

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Nehalem Bay Health District -- #2780

December 2013

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Executive Summary

Milliman has prepared this report for Nehalem Bay Health District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Nehalem Bay Health District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Nehalem Bay Health District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.72%)	(2.72%)	(2.72%)	(2.72%)	(2.72%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.29%**	**13.70%**	**17.08%**	**7.72%**	**11.82%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.85%**	**14.26%**	**17.64%**	**8.20%**	**12.30%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	13.05%	13.05%	18.52%	9.29%	12.00%
July 1, 2013 to June 30, 2015	12.83%	11.60%	18.77%	9.95%	12.68%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Nehalem Bay Health District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$48,335	$123,797
Allocated pre-SLGRP pooled liability/(surplus)	(9,354)	(15,846)
Transition liability/(surplus)	(14,469)	(13,984)
Allocated pooled OPSRP UAL	3,327	1,325
Side account	0	0
Net unfunded pension actuarial accrued liability	27,839	95,292
Combined valuation payroll	47,208	77,657
Net pension UAL as a percentage of payroll	59%	123%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.72%)	(1.55%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$990	$2,012
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$0**	**$0**		**$0**	**$0**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.93%**			**9.15%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($13,984)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(1.32%)
B. Actual employer payroll	22,892
C. Payment to transition liability/(surplus)	(302)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(1.32%)
B. Actual employer payroll	21,611
C. Payment to transition liability/(surplus)	(285)
4. Supplemental payment to transition liability	0
5. Interest	(1,072)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($14,469)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(14,469)	(13,984)
2. Combined valuation payroll	47,208	77,657
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.72%)**	**(1.55%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	47,208	77,657
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Nehalem Bay Fire & Rescue/2869
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Nehalem Bay Fire & Rescue/2869

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Nehalem Bay Fire & Rescue/2869

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Nehalem Bay Fire & Rescue -- #2869

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Nehalem Bay Fire & Rescue to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Nehalem Bay Fire & Rescue.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Nehalem Bay Fire & Rescue

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.91%	13.34%	16.91%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**21.75%**	**18.18%**	**21.75%**	**12.20%**	**16.30%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**22.31%**	**18.74%**	**22.31%**	**12.68%**	**16.78%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	21.66%	13.76%	21.66%	12.31%	15.02%
July 1, 2013 to June 30, 2015	21.73%	14.56%	21.73%	12.91%	15.64%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Nehalem Bay Fire & Rescue

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$170,980	$257,430
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	11,770	2,755
Side account	0	0
Net unfunded pension actuarial accrued liability	182,750	260,185
Combined valuation payroll	166,994	161,484
Net pension UAL as a percentage of payroll	109%	161%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	0.00%	0.00%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,504	$4,183
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	73,057	13,070	15.06%	73,064	11,003
Tier 2 Police & Fire	15.70%	59,324	9,314	15.12%	55,538	8,397
Total Police & Fire		**132,381**	**22,384**		**128,602**	**19,400**
Total		**$132,381**	**$22,384**		**$128,602**	**$19,400**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.91%**			**15.09%**
Aggregate (Default)			**16.91%**			**15.09%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	166,994	161,484
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	166,994	161,484
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Multnomah Drainage/2508
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Multnomah Drainage/2508

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Multnomah Drainage/2508

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Multnomah Drainage -- #2508

December 2013

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Executive Summary

Milliman has prepared this report for Multnomah Drainage to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Multnomah Drainage.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Multnomah Drainage

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.82%	13.82%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	3.37%	3.37%	3.37%	3.37%	3.37%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**20.27%**	**20.27%**	**23.17%**	**13.81%**	**17.91%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**20.83%**	**20.83%**	**23.73%**	**14.29%**	**18.39%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	16.08%	16.08%	23.21%	13.98%	16.69%
July 1, 2013 to June 30, 2015	16.40%	16.40%	23.38%	14.56%	17.29%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Multnomah Drainage

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$855,063	$1,201,260
Allocated pre-SLGRP pooled liability/(surplus)	(165,478)	(153,763)
Transition liability/(surplus)	316,810	322,537
Allocated pooled OPSRP UAL	58,862	12,857
Side account	0	0
Net unfunded pension actuarial accrued liability	1,065,257	1,382,891
Combined valuation payroll	835,129	753,542
Net pension UAL as a percentage of payroll	128%	184%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	3.37%	3.68%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$17,521	$19,521
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$223,811	$35,362	5.78%	$212,234	$12,267
Tier 2 General Service	10.58%	136,525	14,444	10.42%	213,221	22,218
Total General Service		**360,336**	**49,806**		**425,455**	**34,485**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$360,336**	**$49,806**		**$425,455**	**$34,485**
Employer normal cost rate						
General Service			**13.82%**			**8.11%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.82%**			**8.11%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$322,537
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	3.37%
B. Actual employer payroll	406,131
C. Payment to transition liability/(surplus)	13,687
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	3.37%
B. Actual employer payroll	460,140
C. Payment to transition liability/(surplus)	15,507
4. Supplemental payment to transition liability	0
5. Interest	23,467
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**$316,810**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	316,810	322,537
2. Combined valuation payroll	835,129	753,542
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**3.37%**	**3.68%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	835,129	753,542
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Multnomah County/2038
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Multnomah County/2038

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Multnomah County/2038

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Multnomah County -- #2038

December 2013

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Executive Summary

Milliman has prepared this report for Multnomah County to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Multnomah County.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Multnomah County

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	14.25%	13.21%	17.02%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(2.98%)	(2.98%)	(2.98%)	(2.98%)	(2.98%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**14.35%**	**13.31%**	**17.12%**	**7.46%**	**11.56%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.91%**	**13.87%**	**17.68%**	**7.94%**	**12.04%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.26%	9.27%	17.11%	7.76%	10.47%
July 1, 2013 to June 30, 2015	11.27%	9.40%	16.47%	7.66%	10.39%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Multnomah County

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$283,470,055	$437,382,026
Allocated pre-SLGRP pooled liability/(surplus)	(54,859,118)	(55,985,549)
Transition liability/(surplus)	(93,023,540)	(94,261,953)
Allocated pooled OPSRP UAL	19,513,971	4,681,346
Side account	0	0
Net unfunded pension actuarial accrued liability	155,101,368	291,815,870
Combined valuation payroll	276,861,648	274,366,627
Net pension UAL as a percentage of payroll	56%	106%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(2.98%)	(2.96%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,808,675	$7,107,606
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$68,873,960	$10,882,086	5.78%	$75,411,844	$4,358,805
Tier 2 General Service	10.58%	67,659,449	7,158,370	10.42%	69,898,854	7,283,461
Total General Service		**136,533,409**	**18,040,456**		**145,310,698**	**11,642,266**
Tier 1 Police & Fire	17.89%	31,000,695	5,546,024	15.06%	32,109,172	4,835,641
Tier 2 Police & Fire	15.70%	20,322,443	3,190,624	15.12%	19,954,494	3,017,119
Total Police & Fire		**51,323,138**	**8,736,648**		**52,063,666**	**7,852,760**
Total		**$187,856,547**	**$26,777,104**		**$197,374,364**	**$19,495,026**
Employer normal cost rate						
General Service			**13.21%**			**8.01%**
Police & Fire			**17.02%**			**15.08%**
Aggregate (Default)			**14.25%**			**9.88%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($94,261,953)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(2.85%)
B. Actual employer payroll	141,196,038
C. Payment to transition liability/(surplus)	(4,024,087)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(2.85%)
B. Actual employer payroll	144,033,662
C. Payment to transition liability/(surplus)	(4,104,959)
4. Supplemental payment to transition liability	0
5. Interest	(6,890,633)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($93,023,540)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(93,023,540)	(94,261,953)
2. Combined valuation payroll	276,861,648	274,366,627
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(2.98%)**	**(2.96%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	276,861,648	274,366,627
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Multnomah County Rural Fire Protection District #14/2806
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Multnomah County Rural Fire Protection District #14/2806

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Multnomah County Rural Fire Protection District #14/2806

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Multnomah County Rural Fire Protection District #14 -- #2806

December 2013

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Executive Summary

Milliman has prepared this report for Multnomah County Rural Fire Protection District #14 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Multnomah County Rural Fire Protection District #14.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Multnomah County Rural Fire Protection District #14

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.11%)	(0.11%)	(0.11%)	(0.11%)	(0.11%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.55%**	**13.55%**	**19.69%**	**10.33%**	**14.43%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.11%**	**14.11%**	**20.25%**	**10.81%**	**14.91%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.26%	14.26%	19.73%	10.50%	13.21%
July 1, 2013 to June 30, 2015	14.66%	14.66%	19.33%	10.51%	13.24%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Multnomah County Rural Fire Protection District #14

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$47,200	$71,893
Allocated pre-SLGRP pooled liability/(surplus)	(9,135)	(9,202)
Transition liability/(surplus)	(550)	(558)
Allocated pooled OPSRP UAL	3,249	769
Side account	0	0
Net unfunded pension actuarial accrued liability	40,764	62,902
Combined valuation payroll	46,100	45,098
Net pension UAL as a percentage of payroll	88%	139%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.11%)	(0.11%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$967	$1,168
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	46,100	4,877	10.42%	45,098	4,699
Total General Service		**46,100**	**4,877**		**45,098**	**4,699**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$46,100**	**$4,877**		**$45,098**	**$4,699**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($558)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.11%)
B. Actual employer payroll	21,986
C. Payment to transition liability/(surplus)	(24)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.11%)
B. Actual employer payroll	22,316
C. Payment to transition liability/(surplus)	(25)
4. Supplemental payment to transition liability	0
5. Interest	(41)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($550)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(550)	(558)
2. Combined valuation payroll	46,100	45,098
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.11%)**	**(0.11%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	46,100	45,098
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Mulino Water District #23/2778
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Mulino Water District #23/2778

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Mulino Water District #23/2778

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Mulino Water District #23 -- #2778

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Mulino Water District #23 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Mulino Water District #23.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Mulino Water District #23

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	10.58%	10.58%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	0.21%	0.21%	0.21%	0.21%	0.21%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**13.87%**	**13.87%**	**20.01%**	**10.65%**	**14.75%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**14.43%**	**14.43%**	**20.57%**	**11.13%**	**15.23%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	14.58%	14.58%	20.05%	10.82%	13.53%
July 1, 2013 to June 30, 2015	14.93%	14.93%	19.60%	10.78%	13.51%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Mulino Water District #23

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$52,684	$108,297
Allocated pre-SLGRP pooled liability/(surplus)	(10,196)	(13,862)
Transition liability/(surplus)	1,239	1,250
Allocated pooled OPSRP UAL	3,627	1,159
Side account	0	0
Net unfunded pension actuarial accrued liability	47,354	96,844
Combined valuation payroll	51,456	67,934
Net pension UAL as a percentage of payroll	92%	143%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	0.21%	0.16%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,080	$1,760
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	51,456	5,444	10.42%	67,934	7,079
Total General Service		**51,456**	**5,444**		**67,934**	**7,079**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$51,456**	**$5,444**		**$67,934**	**$7,079**
Employer normal cost rate						
General Service			**10.58%**			**10.42%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**10.58%**			**10.42%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$1,250
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.21%
B. Actual employer payroll	18,799
C. Payment to transition liability/(surplus)	39
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.21%
B. Actual employer payroll	30,324
C. Payment to transition liability/(surplus)	64
4. Supplemental payment to transition liability	0
5. Interest	92
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$1,239**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	1,239	1,250
2. Combined valuation payroll	51,456	67,934
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.21%**	**0.16%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	51,456	67,934
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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111 SW Fifth Avenue, Suite 3700
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December 2013

Mt Hood Community College/2905
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Mt Hood Community College/2905

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Mt Hood Community College/2905

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Mt Hood Community College -- #2905

December 2013

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Executive Summary

Milliman has prepared this report for Mt Hood Community College to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Mt Hood Community College.

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Mt Hood Community College

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.15%	13.15%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	1.85%	1.85%	1.85%	1.85%	1.85%
Transition liability/(surplus) rate[2]	0.00%	0.00%	0.00%	0.00%	0.00%
Side account rate relief [2]	(12.51%)	(12.51%)	(12.51%)	(12.51%)	(12.51%)
Net pension contribution rate	**7.33%**	**7.33%**	**10.90%**	**1.54%**	**5.64%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**7.89%**	**7.89%**	**11.46%**	**2.02%**	**6.12%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	5.03%	5.03%	12.69%	3.46%	6.17%
July 1, 2013 to June 30, 2015	4.27%	4.27%	11.29%	2.47%	5.20%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Mt Hood Community College

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$40,095,441	$60,929,132
Allocated pre-SLGRP pooled liability/(surplus)	8,164,634	8,280,818
Transition liability/(surplus)	0	0
Allocated pooled OPSRP UAL	2,760,155	652,131
Side account	55,216,754	52,313,673
Net unfunded pension actuarial accrued liability	(4,196,524)	17,548,408
Combined valuation payroll	39,160,714	38,220,410
Net pension UAL as a percentage of payroll	(11%)	46%
Pre-SLGRP pooled rate	1.85%	1.86%
Transition rate	0.00%	0.00%
Side account rate relief	(12.51%)	(11.77%)
Allocated pooled RHIA UAL	$821,608	$990,119
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$115,698,503	$18,280,363	5.78%	$126,008,735	$7,283,305
Tier 2 General Service	10.58%	119,603,929	12,654,096	10.42%	123,113,364	12,828,413
Total General Service		**235,302,432**	**30,934,459**		**249,122,099**	**20,111,718**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$235,302,432**	**$30,934,459**		**$249,122,099**	**$20,111,718**
Employer normal cost rate						
General Service			**13.15%**			**8.07%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**13.15%**			**8.07%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$0
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	0.00%
B. Actual employer payroll	0
C. Payment to transition liability/(surplus)	0
4. Supplemental payment to transition liability	0
5. Interest	0
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$0**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	0	0
2. Combined valuation payroll	413,167,858	403,407,903
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**0.00%**	**0.00%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**	**$52,313,673**	**$52,313,673**
2. Deposits during 2012		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2012		(4,463,244)	(4,463,244)
5. Side account earnings during 2012		7,367,325	7,367,325
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***		**$55,216,754**	**$55,216,754**

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	$55,216,754	$52,313,673
Side Account 2	0	0
Side Account 3	0	0
Total	**$55,216,754**	**$52,313,673**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$55,216,754	$52,313,673
2. Combined valuation payroll	39,160,714	38,220,410
3. Amortization factor	11.272	11.626
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	(12.51%)	(11.77%)

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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Milliman
111 SW Fifth Avenue, Suite 3700
Portland, OR 97204-3654
503 227 0634

December 2013

Monroe Fire Department/2555
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Monroe Fire Department/2555

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Monroe Fire Department/2555

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Monroe Fire Department -- #2555

December 2013

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This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Executive Summary

Milliman has prepared this report for Monroe Fire Department to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Monroe Fire Department.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Monroe Fire Department

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	15.70%	13.34%	15.70%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	(8.88%)	(8.88%)	(8.88%)	(8.88%)	(8.88%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**11.66%**	**9.30%**	**11.66%**	**3.32%**	**7.42%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**12.22%**	**9.86%**	**12.22%**	**3.80%**	**7.90%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.73%	5.37%	12.73%	3.92%	6.63%
July 1, 2013 to June 30, 2015	12.32%	5.12%	12.32%	3.47%	6.20%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Monroe Fire Department

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$61,661	$93,326
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	(60,303)	(60,664)
Allocated pooled OPSRP UAL	4,245	999
Side account	0	0
Net unfunded pension actuarial accrued liability	5,603	33,661
Combined valuation payroll	60,224	58,543
Net pension UAL as a percentage of payroll	9%	58%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	(8.88%)	(8.91%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,264	$1,517
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	60,224	9,455	15.12%	58,543	8,852
Total Police & Fire		**60,224**	**9,455**		**58,543**	**8,852**
Total		**$60,224**	**$9,455**		**$58,543**	**$8,852**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**15.70%**			**15.12%**
Aggregate (Default)			**15.70%**			**15.12%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($60,664)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.39%)
B. Actual employer payroll	28,346
C. Payment to transition liability/(surplus)	(2,378)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.39%)
B. Actual employer payroll	29,196
C. Payment to transition liability/(surplus)	(2,450)
4. Supplemental payment to transition liability	0
5. Interest	(4,467)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($60,303)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(60,303)	(60,664)
2. Combined valuation payroll	60,224	58,543
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(8.88%)**	**(8.91%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	60,224	58,543
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Molalla Rural Fire Protection District #73/2568
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Molalla Rural Fire Protection District #73/2568

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Molalla Rural Fire Protection District #73/2568

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Molalla Rural Fire Protection District #73 -- #2568

December 2013

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Executive Summary

Milliman has prepared this report for Molalla Rural Fire Protection District #73 to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Molalla Rural Fire Protection District #73.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Molalla Rural Fire Protection District #73

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	16.08%	13.34%	16.08%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	0.00%	0.00%	0.00%	0.00%	0.00%
Transition liability/(surplus) rate[2]	3.70%	3.70%	3.70%	3.70%	3.70%
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**24.62%**	**21.88%**	**24.62%**	**15.90%**	**20.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**25.18%**	**22.44%**	**25.18%**	**16.38%**	**20.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	24.28%	16.65%	24.28%	15.20%	17.91%
July 1, 2013 to June 30, 2015	24.66%	17.48%	24.66%	15.83%	18.56%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Molalla Rural Fire Protection District #73

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$593,883	$1,039,073
Allocated pre-SLGRP pooled liability/(surplus)	0	0
Transition liability/(surplus)	242,128	242,368
Allocated pooled OPSRP UAL	40,883	11,121
Side account	0	0
Net unfunded pension actuarial accrued liability	876,894	1,292,562
Combined valuation payroll	580,038	651,803
Net pension UAL as a percentage of payroll	151%	198%
Pre-SLGRP pooled rate	0.00%	0.00%
Transition rate	3.70%	3.20%
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$12,169	$16,885
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	90,169	16,131	15.06%	180,162	27,132
Tier 2 Police & Fire	15.70%	423,445	66,481	15.12%	413,149	62,468
Total Police & Fire		**513,614**	**82,612**		**593,311**	**89,600**
Total		**$513,614**	**$82,612**		**$593,311**	**$89,600**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.08%**			**15.10%**
Aggregate (Default)			**16.08%**			**15.10%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	$242,368
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	2.89%
B. Actual employer payroll	307,362
C. Payment to transition liability/(surplus)	8,883
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	2.89%
B. Actual employer payroll	321,535
C. Payment to transition liability/(surplus)	9,292
4. Supplemental payment to transition liability	0
5. Interest	17,935
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**$242,128**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	242,128	242,368
2. Combined valuation payroll	580,038	651,803
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**3.70%**	**3.20%**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	580,038	651,803
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Mohawk Valley Rural Fire District/2758
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Mohawk Valley Rural Fire District/2758

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Mohawk Valley Rural Fire District/2758

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Mohawk Valley Rural Fire District -- #2758

December 2013

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Executive Summary

Milliman has prepared this report for Mohawk Valley Rural Fire District to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Mohawk Valley Rural Fire District.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Mohawk Valley Rural Fire District

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	13.93%	13.34%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(14.57%)	(14.57%)	(14.57%)	(14.57%)	(14.57%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**2.44%**	**1.85%**	**5.23%**	**0.00%**	**0.00%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**3.00%**	**2.41%**	**5.79%**	**0.48%**	**0.48%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
		Tier 1/Tier 2		OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	11.30%	3.10%	11.30%	1.65%	4.36%
July 1, 2013 to June 30, 2015	12.63%	5.49%	12.63%	3.84%	6.57%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Mohawk Valley Rural Fire District

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$52,401	$162,921
Allocated pre-SLGRP pooled liability/(surplus)	(10,141)	(20,854)
Transition liability/(surplus)	(84,063)	(90,784)
Allocated pooled OPSRP UAL	3,607	1,744
Side account	0	0
Net unfunded pension actuarial accrued liability	(38,196)	53,027
Combined valuation payroll	51,179	102,199
Net pension UAL as a percentage of payroll	(75%)	52%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(14.57%)	(7.64%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,074	$2,648
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**	**SLGRP Normal Cost Rate**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost**
Tier 1 General Service	15.80%	$0	$0	5.78%	$0	$0
Tier 2 General Service	10.58%	0	0	10.42%	0	0
Total General Service		**0**	**0**		**0**	**0**
Tier 1 Police & Fire	17.89%	0	0	15.06%	53,872	8,113
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**53,872**	**8,113**
Total		**$0**	**$0**		**$53,872**	**$8,113**
Employer normal cost rate						
General Service			**13.34%**			**7.92%**
Police & Fire			**16.72%**			**15.06%**
Aggregate (Default)			**13.93%**			**15.06%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($90,784)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(8.96%)
B. Actual employer payroll	58,444
C. Payment to transition liability/(surplus)	(5,237)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(8.96%)
B. Actual employer payroll	86,074
C. Payment to transition liability/(surplus)	(7,711)
4. Supplemental payment to transition liability	0
5. Interest	(6,227)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012	
(1. - 2C. - 3C. - 4. + 5. + 6.)	**($84,063)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(84,063)	(90,784)
2. Combined valuation payroll	51,179	102,199
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(14.57%)**	**(7.64%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	51,179	102,199
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The “grade-in range” over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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December 2013

Yamhill Communications Agency/2726
Oregon Public Employees Retirement System

Dear Sir or Madam:

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System ("PERS" or "the System") as of December 31, 2012. Information is also provided to assist you in preparing your required financial reporting disclosures under Statements 27 and 45 of the Governmental Accounting Standards Board.

This valuation is advisory and does not affect employer contribution rates. Employer contribution rates effective July 1, 2015 through June 30, 2017 will be calculated in the December 31, 2013 actuarial valuation.

This report reflects the changes made to the System's benefit provisions during 2013, as summarized later in the report. The full development of the valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), OPSRP, Retiree Health Insurance Account (RHIA), and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. Costs of the IAP (Individual Account Program) are not included in this or the system-wide report. Further, costs of pension obligation bond payments are not included in this or the system-wide report.

If you have any questions about this report, please contact Debra Hembree, Manager, Actuarial Analysis Section at Oregon PERS, at 503 603 7704 or Debra.Hembree@state.or.us.

Contents of Report

The executive summary provides the basic information you need including:

- Contribution rates for Tier 1/Tier 2, OPSRP general service, and OPSRP police and fire payroll,
- Information to assist you in completing GASB 27 and GASB 45 financial reporting requirements, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Employer-specific weighted average Tier 1/Tier 2 normal cost rates,
- Transition liability or surplus balances and rate calculation,
- Side account balances, transactions and rate relief,
- A brief summary of methods and assumptions, and
- A brief summary of recent changes in System benefit provisions.

Additional information is provided in the system-wide valuation report, which is available at www.oregon.gov/PERS/section/financial_reports/financials.shtml.

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December 2013
Yamhill Communications Agency/2726

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in September 2013.

Some of the actuarial computations presented in this report are for purposes of estimating the contribution rates effective from July 2015 to June 2017 for System employers. Other actuarial computations presented in this report under GASB Statements No. 27 and 45 are for purposes of assisting System employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the System benefit provisions described in the appendixes of this report, and of GASB Statements No. 27 and 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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December 2013
Yamhill Communications Agency/2726

This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide valuation report.

Sincerely,

Matthew R. Larrabee, FSA, EA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA
Consulting Actuary

The information contained in this document (including any attachments) is not intended by Milliman to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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ACTUARIAL VALUATION REPORT DECEMBER 31, 2012

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

STATE AND LOCAL GOVERNMENT RATE POOL

Yamhill Communications Agency -- #2726

December 2013

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Executive Summary

Milliman has prepared this report for Yamhill Communications Agency to:

- Provide summary December 31, 2012, valuation results for the Tier 1/Tier 2 State and Local Government Rate Pool (SLGRP), Oregon Public Service Retirement Plan (OPSRP), and the Retiree Health Insurance programs (RHIA and RHIPA),
- Provide advisory information calculated as of December 31, 2012, on estimated employer-specific contribution rates effective July 1, 2015 through June 30, 2017,
- Provide employer-specific information on side accounts and pre-SLGRP liabilities as of December 31, 2012, and
- Provide reporting and disclosure information for financial statements for governmental agencies and pursuant to GASB Statements Number 27 and 45.

This report summarizes the valuation results for the SLGRP, OPSRP, RHIA and RHIPA. The full development of these results can be found in the December 31, 2012, system-wide valuation report. This report develops advisory employer-specific side account and pre-SLGRP rates and applies the results from the system-wide valuation to Yamhill Communications Agency.

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Executive Summary

Employer Contribution Rates

SLGRP employers have the option to elect separate Tier 1/Tier 2 rates to be applied to general service and police and fire payroll or to have the default blended rate apply to all Tier 1/Tier 2 payroll.

The following table summarizes the employer contribution rates calculated as of December 31, 2012, for each type of payroll. There are separate normal cost rates for each of the payrolls based on the benefit structure supported by that payroll. The other rates apply to all payrolls regardless of the benefit structure to which they are attributed.

Advisory Employer Rates Calculated as of December 31, 2012, for Yamhill Communications Agency

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	Optional Separate Rates			
	All T1/T2 Payroll	General Service	Police & Fire	General Service	Police & Fire
Pension					
Normal cost rate	12.68%	12.68%	16.72%	7.36%	11.46%
Tier 1/Tier 2 UAL rate[1]	4.24%	4.24%	4.24%	4.24%	4.24%
OPSRP UAL rate	0.60%	0.60%	0.60%	0.60%	0.60%
Pre-SLGRP pooled liability rate	(1.76%)	(1.76%)	(1.76%)	(1.76%)	(1.76%)
Transition liability/(surplus) rate[2]	(0.09%)	(0.09%)	(0.09%)	(0.09%)	(0.09%)
Side account rate relief [2]	0.00%	0.00%	0.00%	0.00%	0.00%
Net pension contribution rate	**15.67%**	**15.67%**	**19.71%**	**10.35%**	**14.45%**
Retiree Healthcare					
Normal cost rate	0.08%	0.08%	0.08%	0.00%	0.00%
UAL rate	0.48%	0.48%	0.48%	0.48%	0.48%
Net retiree healthcare rate	**0.56%**	**0.56%**	**0.56%**	**0.48%**	**0.48%**
Total net employer contribution rate	**16.23%**	**16.23%**	**20.27%**	**10.83%**	**14.93%**

In this report, the payroll of Tier 1 and Tier 2 members is referred to as Tier 1/Tier 2 valuation payroll. Combined valuation payroll refers to the payroll for Tier 1/Tier 2 members, OPSRP general service members and OPSRP police and fire members.

[1] *Includes Multnomah Fire District #10 rate.*

[2] *The transition liability/(surplus) rate and side account rate relief shown may be reduced for each individual payroll such that the net pension contribution rate for that payroll does not go below 0.00%.*

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Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2015 to June 2017 Biennium

The rate collar limits changes in contribution rates for the rate pool, but does not limit changes in rates for individual employers related to pre-SLGRP liabilities or side accounts. In addition, changes in an individual employer's workforce between Tier 1 and Tier 2 or between general service and police and fire can impact that employer's normal cost rate in a way that is not limited by the collar. The table below shows the possible minimum and maximum rates for the SLGRP first effective as of July 1, 2015, which will depend on the funded status as of December 31, 2013. If the Pool's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the Pool's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. The rates shown are before any adjustment for side account rate offsets or pre-SLGRP liabilities.

For comparison, the Pool's funded status as of December 31, 2012 is 83%.

Funded Status as of December 31, 2013	70% to 130%	Under 60% or Over 140%
July 1, 2013 Normal Cost + Tier 1/Tier 2 UAL Rate	15.19%	15.19%
Minimum July 1, 2015 Rate	12.15%	9.11%
Maximum July 1, 2015 Rate	18.23%	21.27%

For individual employers in the SLGRP, these rates are adjusted to reflect the individual employer's normal cost rate, pre-SLGRP pooled liability rate, transition liability rate, and side account rate offsets.

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Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Accounting information provided in this and prior valuation reports are for the purpose of completing the reporting and disclosure requirements of GASB 27. In June 2012 the GASB issued Statement No. 68, which will replace GASB 27 and govern employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaces many of the key elements of the current reporting requirements. Under the new rules, employers will be required to record a balance sheet liability for unfunded pension obligations.

The accounting information provided in future actuarial valuation reports will be revised to reflect the transition to the new GASB standard.

Pension

We understand that employers participating in the SLGRP and OPSRP are considered to be participating in a cost-sharing plan under Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). Cost-sharing employers recognize annual pension expense equal to the contractually required contributions to the plan. The contractually required contribution for pension liabilities for the period July 1, 2013, through June 30, 2015, is NOT calculated as a part of this valuation. The December 31, 2011, actuarial valuation, as modified by Senate Bill 822, calculated the contractually required contribution for the period from July 1, 2013, through June 30, 2015. The December 31, 2013, valuation will calculate the rates effective July 1, 2015. The contractually required contribution is expressed as contribution rates that are applied to the appropriate payroll for the contribution rate period. The rates and appropriate payroll are shown in the table below.

For periods prior to an employer's participation in the SLGRP, accounting information developed as an independent employer should be used, not the information from this exhibit.

Contractually Required Contribution Rate

	Payroll				
	Tier 1/Tier 2			OPSRP	
	Default	General Service	Police & Fire	General Service	Police & Fire
July 1, 2011 to June 30, 2013	12.55%	12.55%	19.75%	10.52%	13.23%
July 1, 2013 to June 30, 2015	12.71%	12.71%	19.35%	10.53%	13.26%

If a side account is established after December 31, 2009, and prior to December 31, 2011, the July 1, 2011 to June 30, 2013 contractually required contribution rate should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

If a side account is established after December 31, 2011, both the July 1, 2011 to June 30, 2013 and the July 1, 2013 to June 30, 2015 contractually required contribution rates should be adjusted to reflect the change in required contribution rate for the period the new side account provides rate relief.

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Executive Summary

Accounting Information (continued)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The contractually required contribution for retiree healthcare liabilities for the period July 1, 2013 through June 30, 2015 was calculated as a part of the December 31, 2011 valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
RHIA July 1, 2011 to June 30, 2013	0.59%	0.50%	0.50%
RHIPA July 1, 2011 to June 30, 2013	0.00%	0.00%	0.00%
RHIA July 1, 2013 to June 30, 2015	0.59%	0.49%	0.49%
RHIPA July 1, 2013 to June 30, 2015	0.00%	0.00%	0.00%

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Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide report.

Yamhill Communications Agency

	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Allocated pooled SLGRP T1/T2 UAL	$1,205,373	$1,716,822
Allocated pre-SLGRP pooled liability/(surplus)	(233,272)	(219,756)
Transition liability/(surplus)	(11,409)	(11,492)
Allocated pooled OPSRP UAL	82,977	18,375
Side account	0	0
Net unfunded pension actuarial accrued liability	1,043,669	1,503,949
Combined valuation payroll	1,177,273	1,076,950
Net pension UAL as a percentage of payroll	89%	140%
Pre-SLGRP pooled rate	(1.76%)	(1.76%)
Transition rate	(0.09%)	(0.09%)
Side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$24,700	$27,899
Allocated pooled RHIPA UAL	$0	$0

UAL amounts for the various pools (SLGRP Tier 1/Tier 2 Pension, OPSRP, RHIA, and RHIPA) are allocated pro-rata based on the ratio of an employer's combined valuation payroll to that of the applicable pool.

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Executive Summary

Principal Valuation Results (continued)

SLGRP

($ in millions)	Actuarial Valuation as of	
	December 31, 2012	**December 31, 2011**
Normal cost	$424.1	$290.9
Tier 1/Tier 2 valuation payroll	3,043.7	3,179.3
Normal cost rate	13.93%	9.15%
Actuarial accrued liability	$30,601.9	$31,109.1
Actuarial asset value	25,464.1	23,240.9
Unfunded actuarial accrued liability	5,137.8	7,868.2
Funded status	83%	75%
Combined valuation payroll	$5,018.0	$4,935.7
UAL as a percentage of payroll	102%	159%
UAL rate[1]	4.24%	10.36%
State and Community College Pre-SLGRP Pooled Liability	$588.9	$598.8
LGRP Pooled Liability	(246.7)	(250.1)
Total Transition Liability	(779.5)	(789.9)
Tier 1/Tier 2 Active Members		
▪ Count	46,437	49,695
▪ Average Age	51.6	51.1
▪ Average Service	17.2	16.4
▪ Average Valuation Payroll	$65,545	$63,976
Tier 1/Tier 2 Dormant Members		
▪ Count	22,891	23,247
▪ Average Age	54.2	53.6
▪ Average Monthly Benefit	$1,353	$1,308
Tier 1/Tier 2 Retirees and Beneficiaries		
▪ Count	70,892	68,509
▪ Average Age	70.1	69.8
▪ Average Monthly Benefit	$1,944	$1,894

[1] *The December 31, 2012 UAL rate shown for the SLGRP includes 0.13% for Multnomah Fire District #10 (0.13% at December 31, 2011). The City of Portland pays an additional 1.03% and the cities of Fairview, Gresham, Troutdale, and Wood Village pay an additional 0.13% (1.00% and 0.13% respectively at December 31, 2011).*

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Executive Summary

Principal Valuation Results (continued)

OPSRP

	Actuarial Valuation as of	
($ in millions)	**December 31, 2012**	**December 31, 2011**
General service normal cost	$213.5	$165.3
OPSRP general service valuation payroll	2,899.3	2,634.7
General service normal cost rate	7.36%	6.27%
Police and fire normal cost	$40.1	$27.7
OPSRP police and fire valuation payroll	349.9	307.9
Police and fire normal cost rate	11.46%	9.00%
Actuarial accrued liability	$1,795.6	$986.4
Actuarial asset value	1,190.0	840.5
Unfunded actuarial accrued liability	605.5	145.9
Funded status	66%	85%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	7%	2%
UAL rate	0.60%	0.15%

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Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
RHIA	**December 31, 2012**	**December 31, 2011**
Normal cost	$4.4	$5.8
Tier 1 / Tier 2 valuation payroll	5,341.7	5,607.9
Normal cost rate	0.08%	0.10%
Actuarial accrued liability	$471.8	$461.1
Actuarial asset value	291.6	239.6
Unfunded actuarial accrued liability	180.2	221.5
Funded status	62%	52%
Combined valuation payroll	$8,590.9	$8,550.5
UAL as a percentage of payroll	2%	3%
UAL rate	0.48%	0.49%

($ in millions)	Actuarial Valuation as of	
RHIPA	**December 31, 2012**	**December 31, 2011**
Normal cost	$1.4	$1.1
Tier 1 / Tier 2 valuation payroll	1,478.4	1,539.5
Normal cost rate	0.09%	0.07%
Actuarial accrued liability	$60.3	$34.4
Actuarial asset value	4.4	4.5
Unfunded actuarial accrued liability	55.9	29.9
Funded status	7%	13%
Combined valuation payroll	$2,432.4	$2,376.9
UAL as a percentage of payroll	2%	1%
UAL rate	0.34%	0.20%

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPA program.

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Weighted Average Tier 1/Tier 2 Normal Cost

Pension

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the amount that would need to be contributed each year to fund the benefits.

Members of the State and Local Government Rate Pool pay a payroll-weighted average normal cost rate using the normal cost rates developed for the pool for each tier and member classification. The table below shows the calculation of the individual employer's Tier 1/Tier 2 normal cost rate by member classification and in aggregate. The employer can elect to pay the member classification rates or the aggregate rate. For purposes of this calculation, all Community Colleges are treated as a single employer.

Development of Employer's Weighted Average Tier 1/Tier 2 Normal Cost Rate

	December 31, 2012			December 31, 2011		
	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost	SLGRP Normal Cost Rate	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost
Tier 1 General Service	15.80%	$313,316	$49,504	5.78%	$302,111	$17,462
Tier 2 General Service	10.58%	463,983	49,089	10.42%	409,987	42,721
Total General Service		**777,299**	**98,593**		**712,098**	**60,183**
Tier 1 Police & Fire	17.89%	0	0	15.06%	0	0
Tier 2 Police & Fire	15.70%	0	0	15.12%	0	0
Total Police & Fire		**0**	**0**		**0**	**0**
Total		**$777,299**	**$98,593**		**$712,098**	**$60,183**
Employer normal cost rate						
General Service			**12.68%**			**8.45%**
Police & Fire			**16.72%**			**15.09%**
Aggregate (Default)			**12.68%**			**8.45%**

An SLGRP employer that has no Tier 1/Tier 2 active payroll will be assigned the weighted average normal cost of the SLGRP as calculated in the system-wide report.

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Transition Liability Information

Outstanding Balance of Transition Liability/(Surplus)

Upon joining the SLGRP, a transition liability or surplus was calculated to ensure that each employer entered the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the transition liability or surplus from the last valuation to the current valuation. Transition liability or surplus rates shown below are those paid on Tier 1/Tier 2 payroll for the indicated periods. For some surplus employers, this rate may differ from the rate paid on OPSRP general service or OPSRP police and fire payroll. In those cases, the payment to transition (surplus) shown below is the payment reflecting the rates on different payroll.

	Transition Liability
1. Transition liability/(surplus) as of December 31, 2011	($11,492)
2. January 1, 2012 through June 30, 2012	
A. Transition liability/(surplus) rate	(0.09%)
B. Actual employer payroll	497,111
C. Payment to transition liability/(surplus)	(447)
3. July 1, 2012 through December 31, 2012	
A. Transition liability/(surplus) rate	(0.09%)
B. Actual employer payroll	533,642
C. Payment to transition liability/(surplus)	(481)
4. Supplemental payment to transition liability	0
5. Interest	(845)
6. Adjustment due to merged or spun-off employers	0
7. Transition liability/(surplus) as of December 31, 2012 ***(1. - 2C. - 3C. - 4. + 5. + 6.)***	**($11,409)**

Development of Transition Liability or Surplus Rate

The rate adjustment attributable to a transition liability or surplus is determined by amortizing the liability or surplus on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For employers joining the SLGRP prior to December 31, 2009, the fixed period ends December 31, 2027. For all others, the fixed period ends 18 years after the date the employer joined the pool.

	December 31, 2012	December 31, 2011
1. Total transition liability/(surplus)	(11,409)	(11,492)
2. Combined valuation payroll	1,177,273	1,076,950
3. Regular amortization factor	11.272	11.626
4. **Total transition liability/(surplus) rate**	**(0.09%)**	**(0.09%)**

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Side Account Information

Reconciliation of Side Accounts

The following table reconciles the total side account from the beginning of the year to the end of the year. Side account transfers were calculated by PERS and made on a monthly basis. The amount of these transfers is shown in the table below.

All information in this table has been provided by PERS.

	New	Continuing	Total
1. Side account as of December 31, 2011	**N/A**		
2. Deposits during 2012		N/A	
3. Administrative expenses			
4. Amount transferred to employer reserves during 2012			
5. Side account earnings during 2012			
6. Side account as of December 31, 2012 ***(1. + 2. + 3. + 4. + 5.)***			

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Side Account Information

Side Account Balances

	December 31, 2012	December 31, 2011
Side Account 1	0	0
Side Account 2	0	0
Side Account 3	0	0
Total	**$0**	**$0**

Development of Side Account Rate

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over a fixed period, and expressing the result as a percentage of combined valuation payroll. For side accounts established prior to December 31, 2009, the fixed period ends December 31, 2027. For side accounts established at a later date, the fixed period ends 18 years after the first rate-setting valuation following its creation.

	December 31, 2012	December 31, 2011
1. Total side account	$0	$0
2. Combined valuation payroll	1,177,273	1,076,950
3. Amortization factor	11.272	0.000
4. Total side account rate (-1. ÷ 2. ÷ 3.) [1]	0.00%	0.00%

[1] *For employers with more than one side account, the total side account rate is determined by calculating the rate on each side account separately and adding the rates together.*

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Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2012, valuation can be found in the system-wide report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

Actuarial cost method	Entry Age Normal.
Amortization Method	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007, and experience in each subsequent biennium is amortized over a closed 10 year period. All existing Tier 1/Tier 2 UAL will be re-amortized over a 20 year period as of the December 31, 2013, rate-setting valuation. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll over a closed 20 year period.
Asset valuation method	Market value of assets, excluding reserves.
Contribution rate stabilization method (rate collar)	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) or independent employer are confined to a collar based on the rate pool's prior pension contribution rate (excluding side account rate offsets). The new contribution rate will not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the current rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funding percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

Net investment return	7.75% compounded annually on system assets.
Interest crediting	7.75% compounded annually on members' regular account balances starting in 2014. 7.75% compounded annually on members' variable account balances starting in 2014.
Consumer price inflation	2.75% per year.
Future general wage inflation	3.75% per year.
Healthcare cost inflation	Ranging from 8.0% in 2013 to 4.7% in 2083.
OPSRP Administrative Expenses	$5.5 million added to OPSRP normal cost.

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Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2011 actuarial valuation are described briefly below and are described in additional detail in the system-wide report.

Changes in Actuarial Methods and Valuation Procedures

- **Actuarial Cost Method**

  The Cost Method was changed from the Projected Unit Credit (PUC) Cost Method to the Entry Age Normal (EAN) Cost Method.

- **Tier 1/Tier 2 UAL Amortization**

  In combination with the change in cost method, the Board chose to re-amortize the outstanding Tier 1/Tier 2 UAL as of December 31, 2013 over a closed period of 20 years. Gains and losses between subsequent rate-setting valuations will be amortized over a closed 20 year period from the valuation in which they are first recognized.

- **Contribution Rate Stabilization Method**

  The "grade-in range" over which the rate collar gradually doubles was modified so that the collar doubles as funded status (excluding side accounts) decreases from 70% to 60% or increases from 130% to 140%. Previously the ranges had been 80% to 70% and 120% to 130%.

- **Allocation of Liability for Service Segments**

  For allocating Tier 1/Tier 2 liability among multiple employers, the weighting between Money Match and Full Formula methodologies was updated to reflect expected future experience.

Changes in Economic Assumptions

- **Investment Return and Interest Crediting**

  The assumed investment return and interest crediting rate was reduced to 7.75%. Previously, the assumed investment return and interest crediting to regular account balances was 8.00% and the assumed interest crediting to variable account balances was 8.25%.

- **OPSRP Administrative Expenses**

  Assumed administrative expenses were reduced from $6.6 million per year to $5.5 million per year.

Changes in Demographic Assumptions

- **Healthy Mortality**

  The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

- **Disability, Retirement from Active Status, and Termination**

  Rates for disability, retirement from active status, and termination were adjusted. Termination rates were changed from being indexed upon age to being indexed upon duration from hire date.

A complete summary of all assumptions used as part of the December 31, 2012 actuarial valuation is contained in the system-wide report.

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Brief Summary of Changes in Plan Provisions

The following change in plan provisions occurred since the December 31, 2011, actuarial valuation:

- Senate Bill 822, signed into law in May 2013, eliminated the SB 656/HB 3349 tax remedy payments for beneficiaries not subject to Oregon income tax and limited the 2013 post-retirement COLA to 1.5% of annual benefit. The effects of this legislation were reflected in this valuation.
- Senate Bill 861, signed into law in October 2013, limited the post-retirement COLA for years beyond 2013 to 1.25% on the first $60,000 of annual benefit and 0.15% on annual benefits above $60,000. The effects of this legislation were reflected in this valuation.
- Senate Bill 862, signed into law in October 2013, makes targeted changes such as allowing garnishment of PERS benefits for convicted felons. These changes do not significantly affect System liabilities and were not reflected in the valuation.

A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide valuation report.

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Required Contribution (ARC). A financial reporting calculation under GASB 27 that expresses the program cost as a percentage of payroll.

Combined Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers.

Employer Contribution Rate. Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

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Glossary

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Pre-SLGRP Liability. The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability. The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar. A methodology that defines the maximum period-to-period change in employer contribution rate. The width of the rate collar is determined by the current contribution rate and funded status.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

Tier 1/Tier 2 Valuation Payroll. Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rate.

Transition Liability. The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool.

Unfunded Accrued Liability (UAL). The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial UAL rate. The final UAL rate can be adjusted by the rate collar.

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